

Major Applied Research Paper No. 16

**THE PRIVATE SECTOR DELIVERY OF
HEALTH CARE: SENEGAL**

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ABSTRACT

As in many developing countries, the uneven performance of public sector health facilities in Senegal has spurred people to turn increasingly to the private sector, including traditional healers, pharmacies and other drug retailers, private physicians and paramedics, nongovernmental providers (e.g., church-run facilities), and government physicians running after-hours practices. Prepared for the Health and Human Resources Analysis for Africa (HHRAA) project of the U.S. Agency for International Development, this paper assesses the capacity of the private sector in Senegal to support the achievement of public health goals and examine the appropriateness of existing public-private linkages.

The study concludes that continued rapid urbanization and the growth of private health providers in urban areas underline the need for an increased private sector role, particularly in urban areas. It recommends that efforts to enhance the role of the private sector be directed to: 1) distribution of public health commodities (such as contraceptives, oral rehydration salts, and iron supplements); and 2) delivery of public health services. The study identifies some significant constraints to further development of the private sector, including government regulations, taxes, and subsidies, and makes specific recommendations for action to spur private sector development.

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ACRONYMS

ASBEF	Association Sénégalaise pour le Bien-Etre Familial
CFAF	Communauté Financière Africaine (CFA) franc (Senegal's currency)
CHO	Community health organization
CMO	Community medical organization
CSS	Senegal's sugar company
DHC	District health committee
DHS	Senegal Demographic and Health Survey
ESP	1991–92 Survey of Priorities, sponsored by the World Bank
GOS	Government of Senegal
HHRAA	Health and Human Resource Analysis for Africa
HFS	Health Financing and Sustainability Project
HMO	Health maintenance organization
IPM	Institut de Prévoyance Maladie (employer-based health insurance plan)
MCH	Maternal and child health
MOPHSA	Ministry of Public Health and Social Action
NGO	Nongovernmental organization
OPTS	Office des Postes et Telecommunication du Sénégal (Senegal's postal service)
ORS	Oral rehydration salts
ORT	Oral rehydration therapy
PNA	Pharmacie Nationale d'Approvisionnement (Senegal's public sector pharmaceutical distributor)
PSF	Projet Santé Familiale
SENELEC	Sénégalaise Nationale d'Electricité (Senegal's electric company)
SOMARC	Social Marketing for Change project
SONEES	Senegal's public water company
SOTRAC	Senegal's public bus company
STD	Sexually transmitted disease
TBA	Traditional birth attendant
UNDP	United Nations Development Program
UNFPA	United Nations Fund for Population Activities
UNICEF	United Nations International Children's Emergency Fund
USAID	U.S. Agency for International Development
VSPP	Volet Secteurs Privé et Para-public (program to establish family planning service delivery within the workplace health facilities)
WHO	World Health Organization

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FOREWORD

This paper is one in a series of reports on findings and policy recommendations from Phase 3 of the Major Applied Research conducted by the Health Financing and Sustainability Project (HFS).

The Health Financing and Sustainability Project is a five-year initiative funded by the United States Agency for International Development (USAID). The project's mandate is to provide technical assistance, conduct applied research, implement training, and disseminate information on health care financing throughout the developing world. The project seeks to influence policy change by advancing knowledge; testing and improving delivery, financing, and administrative methods; strengthening institutional capacity; and enhancing technical capabilities. To date, HFS has been involved in health care financing activities in over 30 developing countries around the world. Applied research activities account for one-quarter of HFS project activities.

HFS has conducted its major applied research in three phases. Phase 1 included a review of the literature and of past experience and the development of a conceptual framework. The papers generated under Phase 1 are essentially conceptual and methodological and are therefore oriented to field researchers and teachers. Nevertheless, because these papers also underscore current gaps in knowledge, they are of use to international donors, health ministry decision makers, and others who are concerned with health care policy.

Phases 2 and 3 were designed to reduce the gap in current knowledge identified in Phase 1. Phase 2 comprised the field research and data collection, and Phase 3 has involved data analysis, report writing, and dissemination. Phase 3 papers have as their main audience developing country decision makers and policymakers, inside and outside the countries where the research was conducted. Methods, findings, and recommendations are written in nontechnical language, with technical information provided in appendices.

Phase 3 products also will be of interest to international donors because they validate or reject important hypotheses and evaluate existing policies. These papers also test new or improved research methods, identify directions for further research, and contribute empirical information to the general body of knowledge. Therefore they should be useful to researchers and academicians.

THE ROLE OF APPLIED RESEARCH IN HEALTH POLICY REFORM

Health financing reform is a prominent political issue and a priority for the health sector around the world. In industrialized nations, containing health care costs has been one main impetus behind efforts to reform health financing policies. In developing countries, a key motivating factor for reform efforts has been the growing demand on increasingly strained public resources represented by the traditional commitment of governments to provide free health services to all.

At the center of the policy debate are discussions about ways to improve equity and efficiency. Ideally, health care financing practices and policies should promote both equity — financial and physical access to care—and efficiency—maximization of health gains through reductions in the costs of production and increases in appropriate consumption. These discussions also include debate about the impact of health financing reforms on quality of care, access by the poor, and the respective roles of the public and private sectors.

Formulating effective policies to address these issues requires sound empirical information on the demand and supply sides of the market for health services. In many developing countries, sound empirical data are seldom available and the public debate about health financing often is dominated by conventional wisdom that may not be well grounded in reality. Some examples of conventional wisdom that require empirical testing include:

- ▲ “The poor will not pay for health care services.”
- ▲ “The private sector is more efficient than the public sector in producing health services.”
- ▲ “The private sector has no role in meeting the public health agenda.”
- ▲ “Where the largest share of total health resources is spent on curative care, the allocation of resources is inefficient.”
- ▲ “Social financing and risk-sharing schemes will not be effective in poor, rural areas.”

A new body of research has begun to emerge that tests the validity of some of these common beliefs about health financing. For example, empirical studies of health care demand in developing countries have demonstrated that when given the choice, even the poorest often prefer to pay for better-quality health care rather than obtain free but low quality health services.

Public policy concerning health finance can greatly benefit from improved knowledge about such issues as the willingness of people to pay for health services, the relative efficiency of public and private providers, private sector roles, and the cost-effectiveness of investment in curative and preventive care. Yet despite the greater attention recently given to applied research in health finance, large gaps in knowledge remain.

AN AGENDA FOR APPLIED RESEARCH

HFS applied research seeks to advance knowledge in key policy areas and to develop analytical capabilities among developing country researchers. The research is designed to address key policy questions, explore neglected areas of research, improve analytical methods, and test new methodological techniques. With the review and advice of an external Technical Advisory Group, the project identified four broad areas of inquiry where major applied research was warranted: cost recovery, productive efficiency, social financing, and the private sector. To meet AID contractual requirements, the project also identified nine specific topics within these categories (see box).

HFS MAJOR APPLIED RESEARCH: AREAS, TOPICS, AND QUESTIONS		
Research Area	Phase 1 Research Topic	Main Research Question
COST RECOVERY	Quality of Care	Willingness to pay for improvements in quality
	Protecting the Poor	Design of equitable cost recovery systems
	Efficiency in Consumption	Design of monetary and other mechanisms that promote efficient patterns of demand for care
PRODUCTIVE EFFICIENCY	Public Sector Reform	Feasibility of improving efficiency in production through personnel incentives
	Reallocating Public Sector Spending	Definition of optimal allocation pattern and appropriateness of current allocation patterns
SOCIAL FINANCING	Expanding Its Role	Feasibility of risk-sharing for the poor
PRIVATE SECTOR	Development of Private Health Care Markets	Determinants and implications of private sector development
	Public-Private Differences in Efficiency	Existence of differences in productive efficiency between government and private providers
	Public-Private Interactions	Feasibility of socially beneficial collaboration between government and private sector

HFS conducted literature reviews (Phase 1) for all but one of these nine topics (the exception was reallocating public sector spending). At AID’s request, an additional field research topic—an assessment of the economic impact of malaria—was also studied. Field research has been conducted (Phase 2) and analytical papers have been written (Phase 3) in all four of the major research areas. These cover the six specific topics as follows:

- ▲ Willingness to pay for improvements in health service quality in the context of cost recovery
- ▲ Impact of health service quality improvements on costs, efficiency, and demand
- ▲ Efficiency of public sector health services
- ▲ Comparison of public and private sector efficiency in health service delivery
- ▲ Impact of social financing of health services on demand, equity, and sustainability
- ▲ Development of private sector health services
- ▲ Economic impact of malaria

In addition to these applied research papers, HFS has produced a wide array of research instruments and data bases. (A list of these is provided in an HFS Theme Paper on “Data Collection as a Policy Tool.”)

POLICY-ORIENTED APPROACH TO APPLIED RESEARCH

HFS has conducted all the field research activities with active collaboration and involvement of local researchers and decision makers. In addition, when considering alternative field sites for major applied research, HFS sought to identify opportunities where research results would feed directly into the policy reform process.

In Niger, for example, HFS provided technical assistance to the government to test two cost recovery systems for curative care in ambulatory public facilities: a fee-per-episode of illness and a household tax with a copayment. Major applied research was conducted to assess and compare key indicators under the two financing systems, including the improvements in quality of care, the costs of quality improvements, people's willingness to pay for quality improvements, and equity implications of the financing methods. Research activities were intertwined with technical assistance to design and implement improved management systems for health facilities, new management procedures for clerical personnel, and improved diagnostic and treatment practices for medical staffs.

In Senegal, HFS conducted applied research to assess various dimensions of the current health system, including the legal and regulatory framework of health financing; the effectiveness of village health committees; the costs, financing, and efficiency of public and private providers; the size, role, and evolution of the private sector; and the demand for health care. The government of Senegal is planning major regional demonstration projects to implement some of the recommendations that emerged from this research.

All HFS major applied research products undergo a formal review process that involves project staff, external experts from academic and international institutions, and members of the project's Technical Advisory Group. HFS seeks excellence in its products and welcomes comments or suggestions about its research work.

If you have questions or comments about our applied research work, please contact the Technical or Applied Research Directors. For information about or to order written HFS products on research, technical assistance, and training, please contact the project's Information Center.

Ricardo A. Bitran
Director of Applied Research

EXECUTIVE SUMMARY

The Health and Human Resources Analysis for Africa project of the U.S. Agency for International Development (USAID) provided funding to USAID's Health Financing and Sustainability (HFS) Project to study development of private sector health services in Senegal. This study is part of HHRAA's larger effort to study private sector development in health in four African countries: Kenya, Senegal, Tanzania, and Zambia. The larger effort reflects USAID Africa Bureau's interest in identifying opportunities for public-private partnerships in health as one way to use existing resources more effectively to increase and improve the availability of health services for African populations and thereby to improve health status. This study also constitutes one of the HFS Project's major applied research activities.

These issues are particularly relevant to Senegal, where constrained public sector resources have made it increasingly important to look for nongovernmental sources of funding for health services—such as user fees. These constraints have also increased interest on the part of the Ministry of Public Health and Social Action (MOPHSA) in looking to nongovernmental sources of health care to augment available health services to better meet the health needs of the population.

PURPOSE AND SCOPE

The purpose of this study is to provide baseline information and analysis that MOPHSA can use to further elaborate policies to enhance public-private partnerships in order to expand coverage, strengthen quality and efficiency of health services, and improve health status in Senegal. Specifically, the study aims to:

- ▲ Describe the size and scope of the private sector in health care delivery in Senegal and assess the actual and potential role of the private sector in promoting the public health agenda;
- ▲ Describe the current linkages between the public and private sectors in health care and identify areas where collaboration has the potential to improve health services delivery; and
- ▲ Identify factors that affect development of the private sector in Senegal, especially legal, regulatory, tax, and financial matters.

METHODOLOGY

This study relied extensively on secondary sources of information, available from existing reports, analyses, government statistics, and surveys. HFS also conducted a qualitative survey in April-May 1994 of 57 private sector facilities (2 hospitals, 6 clinics, and 49 dispensaries). Four types of private providers were included in the survey: Catholic health posts; workplace clinics of private firms and parastatals; private for-profit providers; and other providers (e.g., Red Cross and Muslim

facilities). A series of open-ended questions was asked on 1) problems encountered in starting up a private practice; 2) factors influencing the private sector; 3) provider suggestions for government policies to promote the private health sector and to strengthen its role in providing public health services; and 4) provider attitudes toward traditional healers.

FINDINGS AND RECOMMENDATIONS

Size, Scope, and Distribution of the Private Health Sector

The private health sector in Senegal includes nonprofit facilities; private for-profit facilities; and physicians, nurses, and midwives in private practice. In addition, there is a network of private pharmacies (and illegal drug vendors), most of which are located in large towns and cities, as well as a large network of traditional practitioners. Finally, a number of employers operate health facilities as a benefit for their employees.

The nonprofit private sector comprises facilities operated by nongovernmental organizations (NGOs) such as the Catholic Church and the Red Cross and workplace facilities operated by large employers for the benefit of their employees and dependents. Of the 659 health posts in Senegal, 85 are run by NGOs, 68 of which are Catholic. Catholic health posts comprise only 10 percent of health posts but accounted for an estimated 40 percent of all health post visits in 1988. In addition, the Red Cross operates 13 medico-social centers; the Association Sénégalaise pour le Bien-Etre Familial (ASBEF) operates two family planning clinics in Dakar and Louga; and there is one truly private nonprofit hospital, in Thiès. NGO services have been estimated to cover 5 to 10 percent of the population.

Businesses that employ 450 or more people are required to retain the services of a permanent physician. In addition, many employers provide health services to their employees through the operation of on-site clinics, which range from one-room first aid stations to full-scale hospitals and vary widely in the services provided.

Private for-profit providers—mostly private practitioners and small clinics—are located mainly in Dakar and are oriented to curative rather than preventive care. Their services are unaffordable to the majority of Senegalese. In 1991, there were 25 private polyclinics (19 in Dakar) providing ambulatory care, general hospitalization, and obstetrical care. In addition, there were 47 private for-profit health posts and 32 infirmaries, many owned and operated by nurses and nurse-midwives. In 1989 there were 150 physicians and 16 nurse-midwives in private practice, about 75 percent of whom were in Dakar. A small number of unemployed physicians (about 60 in 1991) and an unknown number of public sector providers operate private practices after hours. Such moonlighting is illegal, but no steps have been taken to curtail it.

The private pharmaceutical sector in Senegal consists of three local pharmaceutical manufacturing companies, a distribution network of four major importers/wholesalers, 247 private

pharmacies (49 percent in Dakar), and about 250 drug depots, or village pharmacies, which are gradually disappearing. The government controls the location of pharmacies through its license-granting procedures.

Traditional practitioners are widely distributed around the country and are therefore more accessible than modern practitioners. They are also more affordable and culturally acceptable. Traditional health practitioners are not regulated in any way by the government, although an estimated 90 percent of the population use their services.

There are three types of health insurance, which cover salaried workers and their families:

- ▲ Public employees, retirees, and their families (about 400,000 people in 1991) are covered by a program administered by the Ministry of Finance (Treasury), which reimburses 80 percent of covered health care costs of employees and their families.
- ▲ Some private employers provide private health insurance to their managerial and professional staffs and their families. Benefits vary considerably, as do reimbursement levels, which average 80 percent of costs. No information was available on the number of employees covered.
- ▲ Under legislation enacted in 1975, private enterprises are required to participate in employer-based insurance schemes called *Instituts de Prévoyance Maladie* (IPMs). However, the legislation is not enforced, and only about one-quarter of salaried workers, and less than 10 percent of the population, is covered (with most in or around Dakar).

PRIVATE SECTOR CONTRIBUTIONS TO THE PUBLIC HEALTH AGENDA

Following the HHRAA framework for assessing the potential contribution of the private sector to the public health agenda, this study focused on key public health problems and related services, including childhood communicable diseases, malaria, and reproductive health services, such as family planning and maternal and perinatal services, including delivery. Data on the use of private providers for these services in Senegal were, however, quite limited. More general data show that the private sector now plays only a limited role in providing health services in Senegal. A recent nationwide household survey showed that, of those seeking health care outside the home, about 15 percent go to private sector providers.

The potential for the private sector to contribute to Senegal's public health agenda will remain limited, at least in the short term, for the following reasons:

- ▲ Most private sector facilities are located in and around Dakar, as well as a few large towns (e.g., St. Louis, Thiès), so that most of the population does not have ready access to the private sector. The major exception is the health posts operated by the Catholic Church, most of which are in rural areas.

- ▲ Prices tend to be quite high in the for-profit sector, and this is a barrier to all but a relatively well-off minority.
- ▲ Private providers (particularly physicians) tend to offer curative over preventive care and are currently oriented to providing relatively expensive services to a small segment of the population.
- ▲ The limited size of the salaried work force effectively constrains the growth of both private and social insurance, an important potential source of demand for private sector services.
- ▲ Poor general economic conditions seriously limit demand for private for-profit health services and even for lower-priced services from nonprofit providers. In particular, the recent devaluation had a severe impact on the standards of living of the traditional clientele of for-profit private health providers—the middle and upper classes.
- ▲ The Catholic Church is probably the most important private source of public health services in Senegal, but it is unable to provide some types of services (e.g., modern contraceptives). This limits options for contracting with the Catholic Church to provide a full range of primary health services.

Despite these constraints, the continued rapid urbanization of Senegal, together with the growing role of private health providers in urban areas, underline the need for an increased private sector role in the public health agenda, particularly in urban areas.

Efforts to promote an enhanced private sector role could be directed to two areas: 1) the distribution of public health commodities such as contraceptives, oral rehydration salts (ORS), iron supplements, and some other public health products; and 2) the delivery of public health services, possibly using vouchers or other means to subsidize in particular services in rural areas or preventive care, if further analysis shows this approach to be a cost-effective way to expand access to health services.

IMPROVING COLLABORATION BETWEEN THE PRIVATE AND PUBLIC SECTOR

Public sector collaboration with the private sector in Senegal can be enhanced through:

- ▲ Improved Coordination: In areas where large employers provide services to their employees and families, it may be cost-effective and equitable for the government to subsidize these facilities to serve the wider population rather than to invest in a separate government facility.
- ▲ Collaboration with NGO Providers: Given that there appears to be redundant personnel in some MOPHSA facilities and that some NGOs (e.g., Catholic health posts) currently achieve comparatively high levels of labor productivity, MOPHSA should consider seconding more of its personnel to NGO facilities and including

NGO providers in training and other measures designed to improve the quality of care.

- ▲ Collaboration with Traditional Healers: Given the extensive network of traditional health workers in Senegal and the fact that a large part of the population does not have ready access to modern services, MOPHSA should consider more systematic attempts to train traditional health workers and to develop good working relationships with them.
- ▲ Collaboration with Pharmacies and Pharmaceutical Sector: The government should consider abolishing the two-tier pricing system under which allowable markups are lower on “social” drugs. In addition, it might consider restoring taxes and duties on normal drugs while continuing to exempt social drugs. The government also should consider eliminating the monopoly of the public sector pharmaceutical distributor (PNA) on providing drugs to the public sector and to community drug funds. Social marketing could be used to take advantage of the private distribution system to provide and promote essential preventive health products (e.g., contraceptives, ORS) at affordable prices.
- ▲ Off-hours Private Practices of Public Sector Physicians: It may be desirable for MOPHSA to be supportive of part-time private practice by some or all of its providers because: 1) it may make it easier to retain quality staff members without having to pay higher salaries; 2) private practice may draw higher-income patients away from heavily subsidized public sector services; and 3) private practices may generate additional demand, in the form of paying clients, at underutilized public hospitals.

PROMOTING PRIVATE SECTOR DEVELOPMENT

The government could take a number of actions that have the potential to directly promote development of the private health sector.

- ▲ Provide a Favorable Policy Environment: Perhaps more than anything else, the macroeconomic policies pursued by the government will either facilitate or constrain the growth and development of the public health sector. Experience in other countries has demonstrated that the private health sector flourishes when economic growth and development is strong.
- ▲ Stimulate the Growth of Health Insurance: The second most important determinant of private health sector development, after economic growth, is probably the growth of health insurance coverage. The government should consider taking steps to improve compliance with its compulsory insurance laws and to reform IPMs by 1) instituting a reinsurance system to cover catastrophic losses incurred by some IPMs; 2) requiring that premiums be sufficient to cover anticipated losses; 3) requiring that IPMs make wider use of copayments and other methods to control utilization; and 4) taking steps to eliminate abuse of IPM membership.

- ▲ Promote Hospital Cost Recovery: Raising fees and applying them to all, removing exemptions, and using means testing to identify the indigent (and perhaps the near-indigent) would provide a powerful stimulus for health insurance. It also would level the playing field for private providers, who would no longer have to compete with free public sector services.
- ▲ Subsidize the Private Provision of Preventive Health Services: The government should consider subsidizing private provision of preventive services, given that many urban residents—a rapidly increasing proportion of the total population—rely on private providers for curative services and that public sector facilities have great difficulty maintaining proper stocks of supplies needed for preventive services. The government also could require that private and social insurance plans cover preventive health services.
- ▲ Expand the Availability of Credit: Streamlined credit programs could be made available to private practitioners to establish their practices, with particularly favorable terms for those willing to establish practices in under-served areas.
- ▲ Examine Taxes and Import Duties: It is difficult to make a convincing case for lowering either the taxes or the import duties faced by most private medical practitioners. However, given the importance attached to these items by physicians, it might be possible to use selective tax and import duty exemptions to encourage increased involvement of private sector physicians in public health activities.

1.0 INTRODUCTION

The Health and Human Resource Analysis for Africa (HHRAA) project of the U.S. Agency for International Development (USAID) provided funding to USAID's Health Financing and Sustainability (HFS) Project to conduct a study on development of private sector health services in Senegal. This study is part of HHRAA's larger effort to study private sector development in health in four African countries: Kenya, Senegal, Tanzania, and Zambia. The larger effort reflects USAID Africa Bureau's interest in identifying increased possibilities of public-private partnerships in health as one way to use existing resources more effectively to increase and improve the availability and quality of health services for African populations, and hence to improve health status.

With growing recognition of the size, scope, and diversity of private health services in Africa, African governments and international donors have taken an interest in better assessing the potential of the private sector to contribute to achieving public sector health goals. This recognition, in turn, has focused attention on the importance of public sector regulatory, legal, and other actions in creating an environment in which the private sector can function well to provide a greater quantity of high-quality services.

1.1 RATIONALE FOR EXPANDED PRIVATE SECTOR INVOLVEMENT

There are several reasons to justify an important role for the public sector in health markets, including to provide public goods, to control for various externalities, to take advantage of declining marginal costs, to compensate for underdeveloped markets or inadequate information, or for reasons of equity. However, none of these necessarily implies that the government should be a direct provider of health services. All of the benefits of public sector involvement can also be obtained through a judicious mix of regulation, subsidies, and taxation. Despite the availability of alternative approaches, most governments in developing countries have elected to be an important, if not the principal, provider of health services. Unfortunately, except in a few cases, they have not performed this function very well. Public sector health budgets have not kept up with the growth in demand for health services caused by population and economic growth. One result has been a decline in the quality of services provided. Public sector providers are also notoriously inefficient as a consequence of highly centralized management, lack of incentives, uneconomic use of inputs, and failure to send consumers the right signals. Even in the area of equity, the public sector has a mixed record: in many systems, the urban rich and middle classes capture the bulk of public subsidies.

In this context, it is not surprising that the population has turned increasingly to the private sector, including traditional healers, pharmacies and other drug retailers, private physicians and paramedics, NGO providers (e.g., church missions), and government physicians in after-hours practices. In most African countries, the private sector already accounts for an important share of

total health spending (World Bank, 1994). Still, there are significant constraints to the development of the private sector which are sometimes difficult to identify and to address. Among these are:

- ▲ government regulations, taxes, and subsidies that inhibit the private sector; and
- ▲ inadequate access, both physical and financial, to private sector services on the part of a large share of the population.

Identifying and addressing these constraints is an important task of public sector policymakers in the health sector. There are several benefits that can be secured by strengthening the role of the private health sector, including:

- ▲ Public sector subsidies can be more effectively targeted to the needy to the extent that those able to pay for their health care are shifted to the private sector.
- ▲ Since private sector providers typically use resources more efficiently and produce higher quality services, the overall performance of the health sector can be improved by increasing the share of services provided by the private sector.
- ▲ Private providers (e.g., NGOs, traditional healers) may be more accessible to certain segments of the population.

Despite these advantages, the optimal public-private mix in a given health system will rarely if ever be an either-or proposition. Instead, both economic theory and the available evidence suggest that a well-functioning health system would combine a rich array of strong public and private organizations in the financing and delivery of health services.

1.2 PURPOSE OF THE DOCUMENT

The purpose of this paper is to assess the capacity of the private sector in one country, Senegal, to support the achievement of public health goals and to examine the appropriateness of existing public-private linkages. The specific objectives of this paper are to:

- ▲ assemble available information on the size and scope of the private sector in health care delivery in Senegal and provide some additional data from field surveys and interviews conducted specially for this study;
- ▲ assess the actual and potential role of the private sector in promoting the public health agenda;
- ▲ describe the current linkages between the public and private sectors in health care and identify potential areas of collaboration for improved health services delivery; and
- ▲ identify factors that have affected, and could further promote, the private sector's development in Senegal, especially legal, regulatory, tax, and financial factors.

It is hoped that this study can provide useful insights to policymakers and donors who are reconsidering the role of the public and private sectors in health service provision and financing. The

intended audience for the study are government policymakers and program managers, USAID/Dakar, and USAID/Washington. The paper should also be helpful to policymakers in other countries that might wish to replicate the study. Finally, the HHRAA project's attempt to collect similar kinds of information on the private health sector in four countries will help build a comparative and cumulative data base from which generalizations may emerge.

1.3 THE ECONOMY OF SENEGAL

Senegal is considered by the World Bank to be a lower middle-income developing economy, with a GDP per capita of \$780 in 1992.¹ In recent years, however, economic performance has been far from satisfactory, and growth in GDP has barely managed to keep up with population growth. Senegal has been in structural adjustment since 1984, with only moderate success. There are chronic budget deficits, and the civil service absorbed 56 percent of government tax revenues in 1991-92 (compared to about 38 percent in other middle-income African countries). Compared to other Sub-Saharan African countries, Senegal has received substantially more foreign assistance per capita, increasing from \$59 in 1984 to \$76 in 1991 (about 10 percent of GDP). Still, the economy's overall infrastructure has deteriorated considerably during the past ten years. Major roads, for example, are desperately in need of repair.

Under structural adjustment, the investment code has been simplified and more competition has been introduced. The government's role in the economy has also been reduced, from 17 percent of GDP in 1980 to less than 10 percent in 1990. There is less regulation; the civil service has been modestly downsized; and the government has divested itself of some public enterprises. Senegal's currency is the CFA franc (CFAF), which is tied to the French franc (FF). The rate was 50 CFAF to 1 FF until January 1994, when it was devalued to 100 CFAF to 1 FF—a 50 percent devaluation. The recent devaluation has produced an enormous shock to both the economy and the population. Sectors dependent on imports have been hit particularly hard, as have the middle and upper classes whose consumption patterns were previously import-intensive. The ultimate success of the devaluation will depend on several factors, including the extent to which inflation can be controlled and the ability of export sectors to expand supply in response to the price incentives provided by the devaluation.

The service sector accounts for about 60 percent of GDP (compared to 35 to 50 percent in other countries at a comparable stage of development). Agriculture accounts for only 12 percent of GDP and is subject to wide fluctuations from year to year depending on levels of rainfall. Nonetheless, agriculture directly employs 60 percent of the labor force. Rapid population growth has contributed to a shift from cash crops to food crops, and agricultural productivity is stagnant. Although the national accounts show some evidence of industrial growth, most industrial production indices exhibit have declined since 1986. The industrial sector suffers from relatively high labor costs, low productivity, aging equipment, and competition from smuggled goods. Fisheries and tourism, previously dynamic sectors, have also experienced much slower growth in recent years.

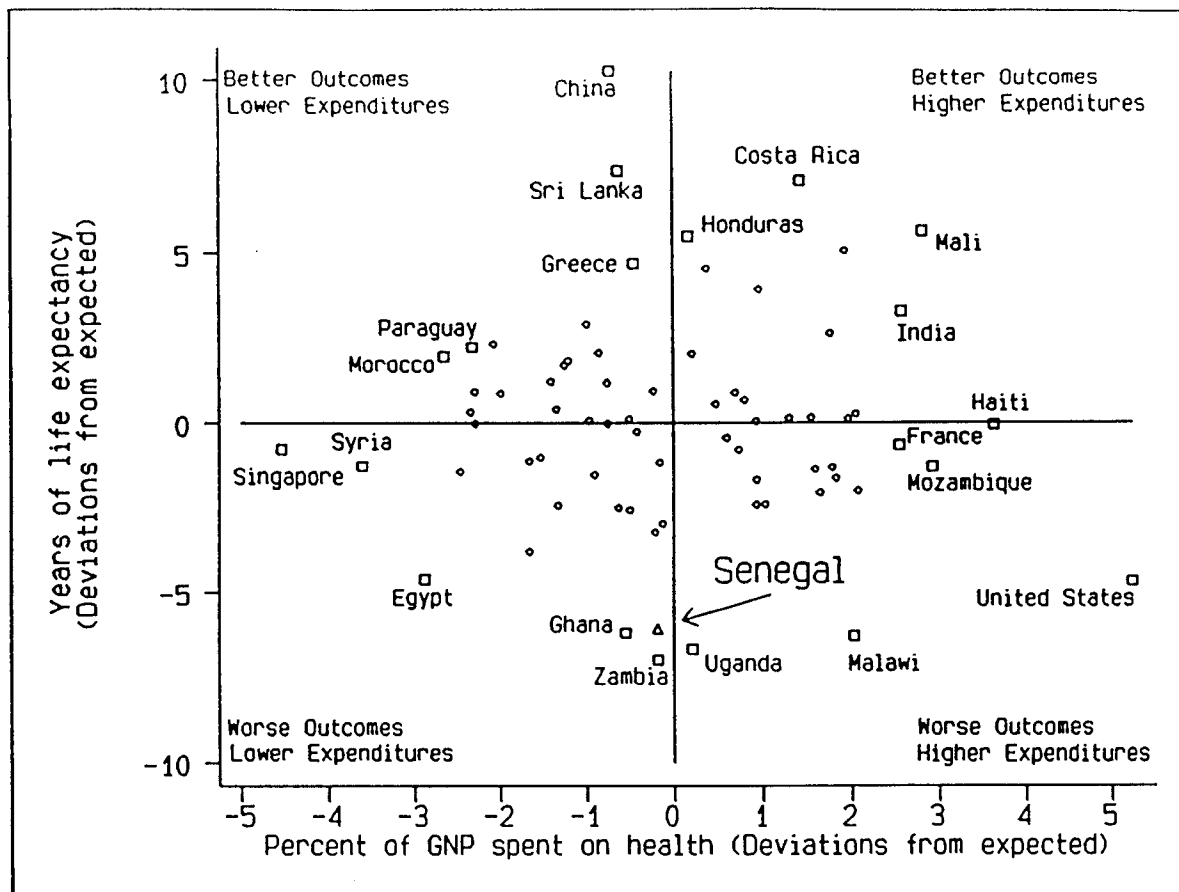
¹ Throughout this paper, dollar figures refer to U.S. dollars.

Senegal's population was 6.9 million at the 1988 census, but with an estimated population growth rate of between 2.8 and 3.2 percent per year, it is expected to be about 10 million by 2000. Forty-five percent of the population is under age 15, and nearly 22 percent of the population lives in and around Dakar. The urban population, which is currently 40 percent of the total, has been growing at a rate of 4 percent per year. Currently, about 125,000 young adults join the labor force each year. The rapidly growing population makes it difficult to provide adequate education and health services. The primary school enrollment ratio has stagnated at about 57 per hundred children of primary school age (compared to an average of 95 for other middle-income African countries). In 1987, for example, only 70 percent of the male population aged 7 to 12 and 46 percent of the female population was in school (Osmanski, et al., 1991, 1). Rapid population growth also contributes to serious environmental problems, which include rapid deforestation, accompanying soil degradation, and saline intrusion.

1.4 THE HEALTH SECTOR IN SENEGAL

Although mortality rates in Senegal have improved, particularly during the 1950s and 1960s, they remain high compared to other countries at similar levels of income (although they are lower than those in other Sahelian countries). The infant and child mortality rates are still quite high—both are estimated to be 68, according to the 1992/93 Demographic and Health Survey (DHS)—and there are large differentials in mortality between urban and rural areas and between children born to mothers with and without education (Ndiaye, Diouf, and Ayad, 1994, 126). The leading causes of infant and child mortality are diarrhea, respiratory disease, and malaria. Maternal mortality is a leading cause of death among women of reproductive age, and elevated fertility rates are an important factor contributing to poor maternal and child health. Malnutrition is also an important problem in Senegal, which worsens the effects of numerous other health problems. Only 53 percent of the population (79 percent urban, 38 percent rural) have access to safe water, and only 32 percent (87 percent urban, 2 percent rural) have access to sanitation facilities (World Bank, 1994).

According to the World Bank (1994), combined public and private expenditures on health were \$220 million (\$30 per capita) in 1990, about average among lower middle-income countries. However, the data in *Graph 1-1* suggest that health resources may not be used very effectively in Senegal, compared to other countries. They show that although the share of per capita GDP spent on health in Senegal is about average for a country at its level of development, the average life expectancy at birth is about six years less than expected.



GRAPH 1-1

Estimates of total health expenditures, as well as their public and private components, are available from several sources. Unfortunately, they are not completely consistent. *Exhibit 1-1* provides estimates of the 1989 public-private distribution of health expenditures prepared for a recent USAID/Senegal population and health sector assessment (Du Moulin and Lagacé, 1990, 7). According to these estimates, public sector expenditures accounted for about one-third of total health sector expenditures; private hospitals, clinics, and physicians accounted for another third; and private expenditures at pharmacies accounted for the remaining third. The total expenditures of 40 billion CFAF corresponded to approximately 3 percent of GDP, or about 6,000 CFAF (\$20) per capita. By comparison, the World Bank (1994) has estimated that total health sector spending was \$220 million (or \$30 per capita) in 1990, broken down as follows: public sector (\$96.4 million), aid flows (\$36.2 million), and private sector (\$87.6 million).

Senegal's health sector receives substantial foreign assistance (about \$5 per capita in 1990). Foreign assistance has in fact dominated the investment part of the budget. During 1987-90, for example, donors financed 94.1 percent of the health/nutrition part of the investment budget. International assistance increased from 45 percent of public sector health resources in 1981 to 55 percent in 1989 (World Bank, 1992b, 14). In addition to USAID, which ranked fourth among health donors in 1980s, the leading donors include France (consistently the largest donor), Belgium, Italy, UNICEF, UNFPA, UNDP, and the World Bank (Osmanski et al., 1991, 77-85). Since 1987 donors have coordinated their assistance to Senegal's health sector in regular monthly meetings. In some cases, donors have agreed among themselves to focus on particular program areas. UNFPA and USAID take the lead, for example, in family planning; UNICEF takes the lead in immunization and diarrhea control.

Since approximately 90 percent of all drugs consumed in Senegal are imported, the 50 percent devaluation of the CFAF in January 1994 has already had a major impact on the health sector (Perrot, 1994, 26-37; COPHASE, 1994; Ba, 1994). The devaluation accelerated adoption of a basic drug policy relying largely on generic drugs and provided impetus for use of less drug-intensive treatment protocols in MOPHSA facilities (COPHASE, 1994, 26). The government of Senegal (GOS) intervened with several measures to soften the impact of the devaluation (these are discussed below). In addition to pharmaceuticals, the devaluation also increased the cost of other health sector inputs with a heavy import content, e.g., medical equipment, medical supplies and fuel.

EXHIBIT 1-1 ESTIMATED HEALTH SECTOR EXPENDITURES	
Component	Expenditures (billion CFAF)
Ministry of Public Health	11.0
Other Ministries	1.5
Community Financing	0.5
SUBTOTAL PUBLIC	13.0
Hôpital Principal	4.0
Hôpital St. Jean (Thiès)	2.0
Private Clinics	2.0
Private Physicians	4.0
Private Pharmacies	15.0
SUBTOTAL PRIVATE	27.0
TOTAL	40.0
<i>Source: Du Moulin et Lagacé (1990, 7)</i>	

1.5 ORGANIZATION OF THE REPORT

This report is organized as follows:

- ▲ Section 2 describes the methodology used in the assessment, including a description of data sources and principal secondary sources used.
- ▲ Section 3 provides the context in which the private health sector operates in Senegal, including: 1) health status and principal health problems; 2) an overview of the public health sector, including goals and priorities; and 3) recent activities in the area of health reform.
- ▲ Section 4 reports the main findings of the assessment and is divided into five sections:
 - △ Section 4.1 provides information on the size and scope of the private health sector in Senegal and includes a typology of private providers;

- △ Section 4.2 reports on recent surveys that provide a basis for comparing public and private health sector performance along a number of dimensions;
 - △ Section 4.3 describes what the private sector currently does in support of public health initiatives in the areas of reproductive health and control of communicable diseases;
 - △ Section 4.4 discusses existing areas of collaboration and linkages between the public and private sectors; and
 - △ Section 4.5 identifies factors affecting the development of the private sector, including: 1) the legal and regulatory environment; 2) the financial environment (e.g., taxes, subsidies, availability of capital); and 3) prices and consumers' ability to pay them.
- ▲ Section 5 provides conclusions and recommendations for each area listed above.

2.0 METHODOLOGY

Much of the information in this report was taken from a few key sources: 1) the final report of the 1992/93 Senegal Demographic and Health Survey (DHS)² (Ndiaye, Diouf, and Ayad, 1994); 2) reports prepared in connection with a recent USAID/Dakar-sponsored health and population sector assessment (Osmanski et al., 1991; Du Moulin and Lagacé, 1990; Pillsbury, 1990); and 3) data and reports from four studies carried out by the Health Finance and Sustainability (HFS) Project:

- ▲ A nationally representative survey of 92 public sector facilities (23 health centers, 46 health posts, and 23 health huts), which provides quantitative data on levels of services provided, quality of care, productivity, physical facilities, fees, revenues, and costs covering the period July 1990–June 1991 (Bitran, Brewster, and Ba, 1994b). Data were collected through personal interviews, analysis of facility records, and direct observation of medical staff performance. In addition, staff and patients were interviewed concerning their perceptions of quality of care. Enumerators included 12 people with a background in finance and accounting and four nurses (two of whom were former university professors). The field work was carried out over a three-month period.
- ▲ A similar survey of 57 private sector facilities (2 hospitals, 6 clinics, and 49 dispensaries) that was carried out in the same areas, covered the same period, and used many of the same enumerators as the public sector survey (Bitran, Brewster, and Ba, 1994a). Four types of private providers were included in the survey (with the number sampled in parentheses): Catholic health posts (30); workplace clinics of private firms and parastatals (13); private for-profit providers (6); and other providers such as Red Cross and Muslim facilities (8). Nineteen of the 57 facilities were located in Dakar, 13 in Fatick-Kaolack, 20 in Thiès-Diourbal, and 4 each in St. Louis-Louga and Tambacounde-Kolda.
- ▲ A qualitative survey of 57 private sector providers, conducted in April-May 1994 (i.e., a few months after the January 1994 currency devaluation). This qualitative survey, which was carried out in the facilities included in the HFS survey of private sector facilities, consisted of a series of open-ended questions on 1) problems encountered in starting up a private practice (e.g., obtaining necessary licenses, attracting clients, start-up financing); 2) factors influencing the private sector; 3) provider suggestions for government policies to promote the private health sector and to strengthen its role in providing public health services; and 4) provider attitudes toward traditional healers.
- ▲ Further analysis of the health sector data in the World Bank-sponsored 1991-92 Survey of Priorities (ESP), which was supported by the HFS Project (Sadio, 1994).

² *Enquête Démographique et de Santé au Sénégal (EDS-II) 1992/93.*

3.0 CONTEXT

3.1 HEALTH STATUS AND PROBLEMS

Infant and child mortality rates are still very high in Senegal, although they have continued to decline significantly during the past ten years. According to recent estimates based on the 1992/93 DHS, as well as the results from earlier surveys, the infant mortality rate declined 24 percent between 1978-82 and 1988-92, from 90 to 68 per 1,000 live births. More than half of infant deaths occur in the first month—that is, the neonatal mortality rate is 35 per 1,000). The child mortality rate (ages 1 to 4) declined by 43 percent during the same period, from 119 to 68 per 1,000 (Ndiaye, Diouf, and Ayad, 1994, 124-25). The 1992/93 DHS data also show marked differentials in combined infant-child mortality rates (ages 0 to 4) according to a variety of characteristics, including:

- ▲ place of residence (184 rural versus 102 urban);
- ▲ region of residence (170-195 in the Center, South, and Northeast regions versus 110 in the West region);
- ▲ mother's education (171 among women without any education versus 99 with primary education and 52 with secondary education and above);
- ▲ use of prenatal and delivery services (180 when neither is used versus 100 when both are used); and
- ▲ the interval between the most recent birth and the birth immediately preceding it (191 when the interval between births is less than two years versus 102 when it is four years or more).

According to a recent health sector assessment (Osmanski et al., 1991), half of infant deaths are attributable to diarrhea, respiratory disease, and tetanus, with additional deaths during the second year from measles and malaria. As part of the 1992/93 DHS, a separate questionnaire was administered to several informed individuals in each of the communes in which the household survey was conducted. One of the questions asked for a list of the four principal health problems of children under age 5, in order of importance. The results are summarized in *Exhibit 3-1*.

Maternal mortality is a particularly serious problem in Senegal. Data on the survival of sisters have been used to obtain both direct and indirect estimates of maternal deaths per 100,000 births. The direct estimate for the period 1979-92 is 510, whereas the indirect estimate is 484 (Ndiaye, Diouf, and Ayad, 1994, 138-40). Among the five African countries for which comparable estimates have been prepared, only Niger has a higher estimated rate (652). It is clear that Senegal's elevated fertility levels, which are associated with closely spaced births and which expose mothers to continued risk, are an important source of high infant-child and maternal mortality (National Academy of Sciences, 1989).

EXHIBIT 3-1 PRINCIPAL HEALTH PROBLEMS OF CHILDREN UNDER AGE 5 (percent of respondents to 1992/93 DHS)		
	Most Important Health Problem	Among Four Principal Health Problems
Malaria	54.0	87.8
Diarrhea	18.5	72.3
Measles	9.8	43.9
Fever (unspecified cause)	0.6	10.6
Cough/Respiratory Problems	1.9	17.8
Eye Infections/Problems	8.4	26.4
Skin Problems	2.6	19.8
All Other	4.2	121.4
TOTAL	100.0	400.0
Source: 1992/93 DHS (Ndiaye, Diouf, and Ayad, 1994, 185)		

3.2 PUBLIC HEALTH SECTOR

3.2.1 Health Infrastructure

The public health infrastructure consists of facilities operated by the Ministry of Public Health and Social Action (MOPHSA), the military, and various municipalities. At the top of the pyramid (but not considered to be part of the formal public health system) are four teaching hospitals, which are all located in Dakar and whose 1,590 beds represent 40 percent of hospital beds in the country. In addition, the 663-bed Hôpital Principal, which is a military hospital staffed jointly by French and Senegalese army physicians, is also located in Dakar and serves both military and private (fee-for-service) patients.

The first formal level of the public health system consists of ten regions, each with a population of about 750,000. All regions (except Fatick and Kolda) are equipped with a regional hospital, which provides some types of specialized care (e.g., OB/GYN, general surgery, ophthalmology). A Regional Medical Director (*Médecin-chef de Région*) is responsible for the operation of the regional hospital as well as for the planning and implementation of the regional health program.

The second tier of the public health system consists of 45 health districts, each with a population of about 250,000. Together these include a total of 47 health centers, many of which are

equipped with maternal and child health centers and maternities.³ Each health center is a small hospital of 20-30 beds staffed by a physician and midwife, together with other paramedical staff. They provide general hospitalization, complicated obstetrical delivery, medical and surgical emergency, and family planning services.

The third tier of the public health system consists of 659 health posts staffed by a male nurse. Eighty-five of these are operated by nongovernmental organizations (NGOs). The lowest level of the public health system, which is in fact not an integral part of the system, comprises 1,409 health huts (*cases de santé*), staffed by community-supported health workers, and 495 rural maternities, staffed by traditional birth attendants (TBAs) (Osmanski et al., 1991, 27-28; World Bank, 1992b, 4-5).

3.2.2 Personnel

In 1989, there were 5,835 regular salaried staff of MOPHSA, including 407 doctors, 934 nurses, and 474 nurse-midwives (Osmanski et al., 1991, 23).⁴ In addition to MOPHSA staff, staff members of some NGOs (e.g., Catholic missions) and municipally recruited staff (e.g., nurse aids, drivers, guards) were also working in the public health sector. The MOPHSA does not use its human resources optimally. Once trained, staff are assigned to the central level and are frequently relocated with no consultation with managers in the areas affected. Staff returning from long-term training are often assigned to positions that do not require or fully utilize their newly acquired skills. Most professionals find a way to be posted in cities, particularly in and about Dakar (Osmanski et al., 1991, 23). In 1990, for example, 62 percent of salaried medical officers and 50 percent of nurse-midwives were posted in the Dakar region, which accounted for only 22 percent of the population.

3.2.3 Drug Procurement and Distribution

The Pharmacie Nationale d'Approvisionnement (PNA) manages the public sector drug procurement and distribution system. It procures and distributes pharmaceutical products under the government budget (*Budget d'Etat*) to all MOPHSA health facilities. In addition, it sells drugs to community and sub-district health committees at subsidized prices. PNA has been widely criticized for its inefficiency and financial mismanagement, particularly in its role as supplier of MOPHSA facilities. Although the latter generally receive drugs in the amount budgeted, the items received do not necessarily correspond to those requisitioned (Osmanski et al., 1991, 37). There are frequently delays in procuring and paying for drugs, which are not always obtained from the least expensive

³ In addition to the MOPHSA health infrastructure, the military also maintains a separate system of 2 hospitals, 13 garrison health centers, 12 family health centers, and 11 garrison health posts—all of which also serve local civilians.

⁴ In addition, 167 staff were detached to MOPHSA by the armed forces, and 114 foreign technical assistants were working with MOPHSA.

sources. Due to poor inventory control, stock-outs are common. PNA is undergoing a three-year process of privatization, and in 1995 it is expected to become an autonomous organization linked to MOPHSA (Watt, 1993).

3.2.4 Health Financing

Although the GOS share of GDP has remained fairly constant over time, GOS funding of the health sector has decreased from 9 percent of the recurrent budget in 1970 to 5 percent in 1989 (Du Moulin and Lagacé, 1990, 9).⁵ Actual expenditures (as compared to budgeted expenditures) have been closer to 4 percent of the recurrent budget. In real terms, per capita GOS health expenditures have declined by nearly 60 percent since 1970 and by 25 percent since 1980. Moreover, these declines have disproportionately affected non-personnel expenditures, which have declined from 40 percent of the budget in 1980 to 30 percent in 1989. Although hospitals are favored in allocation of the budget (i.e., they consume 50 percent of the GOS budget and 86 percent of the drug budget), they are in reality understaffed and underfunded. The budget of the Hôpital Principal, a hospital run jointly by the French and Senegalese militaries and reputed to be the best in the country, has a budget equal to 80 percent of the budgets of all other public hospitals combined (Du Moulin and Lagacé, 1990, 10).

3.2.5 Utilization and Performance

The decline in GOS funding for health undoubtedly has led to a serious deterioration in the quality of services provided, which in turn has led to declines in utilization throughout the public health system (World Bank, 1993b, 19). Between 1978 and 1986, the number of consultations recorded in public health facilities decreased by 59 percent, and the number of hospital days declined by 67 percent—despite the fact that Senegal's population increased by 25 percent during this period (World Bank, 1991, 9).

An HFS survey of public sector facilities found evidence of very low levels of staff productivity, particularly in facilities located in Dakar. For example, the average government doctor working in Dakar saw fewer than two ambulatory and two hospitalized patients per day. By comparison, Catholic health post doctors working outside Dakar saw as many as 40 patients per day. Similarly, average nurse productivity in MOPHSA facilities in Dakar (two outpatient visits per day) was approximately one-tenth of average nurse productivity in the private sector (Bitran, Brewster, and Ba, 1994a; 1994b).

As part of the commune-level survey of the 1992/93 DHS, respondents were asked to identify the four principal problems, in order of importance, they confronted in obtaining health care. The responses are summarized in *Exhibit 3-2*. Interestingly, they show that problems of

⁵ As part of a World Bank project, the GOS has agreed to increase the health sector's share of the recurrent budget to 7 percent by 1995 (World Bank, 1992b, 25).

physical and financial access (i.e., “facilities not available,” “facilities too distant,” “consultations (or medicines) too expensive”) were cited as the most important obstacle by over 60 percent of respondents, compared to only 16.5 percent who cited quality-related problems (i.e., “service not available,” “medicines not available,” “attitudes of providers”). However, it is important to note that in many cases the “informed” respondents were MOPHSA providers (Ndiaye, Diouf, and Ayad, 1994, 171).

EXHIBIT 3-2 PRINCIPAL OBSTACLES TO SEEKING HEALTH CARE (percent of responses)		
	Most Important Problem	Among Four Principal Problems
ACCESSIBILITY		
Facilities not available	16.7	19.5
Facilities too distant	23.2	46.4
Service not available in facility	6.0	17.6
Medications not available	10.5	35.6
COST		
Consultations too expensive	4.7	36.0
Medications too expensive	16.7	52.9
OTHER		
Attitudes of providers	0.0	11.3
None	10.4	41.6
All other	10.6	26.5
Does not know/no response	1.2	112.5
TOTAL	100.0	400.0
<i>Source: 1992/93 DHS (Ndiaye, Diouf, and Ayad, 1994, 184)</i>		

3.3 HEALTH SECTOR REFORM PROGRAM

The GOS adopted a National Health Policy in June 1989 designed to guide the restructuring of the health sector during the 1990s (Ministère de la Santé Publique, 1989; World Bank, 1993b, 61). A total of 13 strategic objectives, each involving two to six specific strategies, were identified in the National Health Policy. The main objectives were to:

- ▲ increase health sector participation by the population through community health organizations (CHOs) and NGOs;
- ▲ improve the efficiency and reliability of the drug distribution system;

- ▲ promote decentralization by strengthening health districts and by integrating existing vertical programs (e.g., immunization); and
- ▲ improve resource management and planning and budgeting capacity at the central and regional levels.

The private sector played only a minor role in the new National Health Policy (World Bank, 1992b, 7; Ministère de la Santé Publique, 1989). One of six strategies designed to promote the policy's strategic objective of increasing health sector participation by the population (*"Promouvoir la participation des populations à l'effort de santé"*) called for promotion of the for-profit and NGO sectors (*"Promotion du secteur associatif et privé"*). The policy's final strategic objective (*"Promouvoir la collaboration inter- et multisectorielle"*) included a strategy calling for coordination between the public and private sectors (*"Promotion de la concertation avec le secteur privé de santé"*). These are the only two places in the 1989 National Health Policy that refer to the private sector.

Pursuant to the adoption of the 1989 National Health Policy, health sector reform has focused on three areas:

- ▲ reorganization of the Ministries of Public Health and Social Development into a single Ministry of Public Health and Social Action (MOPHSA);
- ▲ expansion of the role of user fees for health services, with funds managed at the community level; and
- ▲ decentralization of health sector planning and implementation to the regions and districts.

3.3.1 Reorganization

The Ministry of Public Health and the Ministry of Social Development were merged into a single Ministry of Public Health and Social Action (MOPHSA), combining responsibility for public health and family planning activities under a single ministry. An important part of this reorganization has been the integration of previously vertical programs (e.g., family planning, immunization) into the primary health system. The new ministry has felt the impact of consolidation and decentralization, experiencing cutbacks in personnel and operating budgets.

One of the most important features of the reorganization has been development of a district health system throughout the country. Health districts (which replace *circonscriptions médicales*) contain 150,000 to 300,000 people and are organized around a health center that has supervisory responsibility for 15-30 health posts (World Bank, 1991, 12). Each health district is designed to provide complete and equitable coverage to the entire population, a clear delineation of responsibilities between health centers and health posts (reflected in new staffing norms), and the integration of vertical services (e.g., family planning) into the appropriate health facility. Each

district is to be directed by a district management team and to include community participation through community health organizations. There are 45 health districts covering the entire country.

3.3.2 User Fees

The MOPHSA introduced a nationwide system of user fees at health centers and health posts in 1980, building on earlier experience with user fees in a series of primary health projects in Senegal sponsored by USAID, the Belgians, and other donors. Although fees are set by communities through community health organizations and district health committees, the original policy included fee guidelines that were for the most part not revised during the first 10 years of the system's operation. Fees for adult consultations in health centers and health posts range from 50 to 100 CFAF (children's fees range from 25 to 50 CFAF), and fees for a delivery range from 1,000 to 2,000 CFAF.

Although numerous exemptions have been granted by the GOS to special categories of clients (e.g., civil servants, students), the system has managed to generate a significant amount of revenue. A 1983-84 study in the Peanut Basin found that revenue from user fees amounted to 80 percent of recurrent costs (excluding personnel) and that 58 percent of revenue was used to purchase pharmaceuticals (Osmanski et al., 1991, 47). Per capita revenue averaged 55 CFAF in 1988, and at the health post level (which accounts for about 60 percent of all outpatient visits) essentially all drugs are purchased with fee-generated revenue (Du Moulin and Lagacé, 1990, 13). Nevertheless, there are significant differences in fee revenue collected per capita across the country. In 1988, for example, per capita revenues in the Pikine neighborhood of Dakar averaged 201 CFAF, versus only 36 CFAF per capita in the Fatick and Kaolack regions.

The full potential of cost recovery has been hampered by mismanagement of the funds collected through community health organizations, or CHOs (World Bank, 1992b, 16; 1993b, 63-64). Receipts have been used to hire support personnel in excessive numbers or to finance non-health-related expenses, or have been hoarded as political war chests by local leaders. Recent GOS reforms of CHO procedures, which include co-management of funds by health personnel, are expected to ensure that all funds collected will be spent on behalf of the health facility in which they were collected.

In contrast, cost recovery has never been fully implemented in hospitals. An official list of hospital charges was enacted in 1968, but the legislation mandating collections was never effectively enforced. Fees were to have been collected from all patients not classified as indigent, with the revenue to be sent directly to the national treasury. Because the revenue collected reverts to the treasury, there is no incentive for hospitals to collect fees. It has been estimated that annual hospital fee collections amount to about 5 CFAF per capita—about \$0.02 (Du Moulin and Lagacé, 1990, 11).

3.3.3 Decentralization

The GOS has been moving toward decentralization for many years (Ndiaye, 1990). In 1985, it launched the Regional Integrated Development Plans and Community Investment Plans, designed to give regions and communities a greater voice in development planning. MOPHSA began to encourage the development of District and Regional Health Development Plans a few years ago, with assistance from USAID and other donors (Osmanski et al., 1991, 48).

An important feature of Senegal's health sector decentralization is the role of CHOs and district health committees (DHCs). At the level of health posts, CHOs help collect and manage revenue from user fees, which is used to purchase drugs and to pay the salaries of community workers. Each CHO is represented on its DHC, which fulfills a similar role in relation to the health center.

4.0 FINDINGS

4.1 SIZE, SCOPE, AND DISTRIBUTION OF THE PRIVATE HEALTH SECTOR

The Senegalese health infrastructure includes public facilities operated by the MOPHSA, municipalities, and the military; nonprofit facilities (e.g., health posts) operated by such organizations as the Catholic Church or the Red Cross; private for-profit facilities (e.g., Clinique Pasteur); and physicians, nurses and midwives in private practice. In addition, there is a network of private pharmacies (and illegal drug vendors), most of which are located in large towns and cities, and a large network of traditional practitioners. Finally, a number of employers operate health facilities as a benefit for their employees. *Exhibit 4-1* outlines the health infrastructure in Senegal.

4.1.1 Nonprofit Sector

The nonprofit private sector consists of facilities operated by nongovernmental organizations (NGOs), such as the Catholic Church or Red Cross, and workplace facilities operated by large employers for the benefit of their employees and dependents (e.g., Richard Toll Hospital).

4.1.1.1 Nongovernmental Organizations (NGOs)

Of the 659 health posts in Senegal, 85 are run by NGOs, 68 of which are Catholic (Osmanski et al., 1991, 30). Catholic health posts tend to be larger and better staffed and are located mostly in rural areas. Although they account for only 10 percent of health posts, they provided an estimated 40 percent of all visits to health posts in 1988.⁶ In addition, the Red Cross operates 13 medico-social centers, and the Association Sénégalaise pour le Bien-Etre Familial (ASBEF, the IPPF affiliate) operates two family planning clinics, in Dakar and Louga. In addition, there is one truly private nonprofit hospital, St. Jean de Dieu in Thiès. These NGO services together have been estimated to cover only 5 to 10 percent of the population (Osmanski et al., 1991, 41).

⁶ This statistic is uncertain, however, because gaps in MOPHSA service statistics for that year required that the total be estimated.

EXHIBIT 4-1 TYPOLOGY OF PUBLIC AND PRIVATE HEALTH PROVIDERS				
	Public Sector	Private Nonprofit	Private For-Profit	Traditional
TERTIARY CARE	4 Teaching hospitals	1 Nonprofit hospital (St. Jean de Dieu in Thiès)		
	1 Social Security hospital	1 Parastatal hospital (Richard Toll)		
	1 Municipal hospital			
	2 Military hospitals			
	8 Regional hospitals			
SECONDARY CARE	49 MOPHSA health centers		25 Polyclinics (19 located in Dakar)	
	25 Military health centers			
PRIMARY CARE	516 MOPHSA health posts	85 Health posts (68 Catholic, 13 Red Cross, 2 ASBEF)	47 Health posts	? Traditional healers
	11 Military health posts	30 Workplace clinics	32 Infirmaries	? Traditional birth attendants
	59 Municipal health posts		150 Private physicians	
	1,409 Community health huts		? Off-hours practices of public sector medical staff	
	495 Rural maternities		247 Pharmacies	
			250 Drug depots	
			? Street vendors of drugs	
			14 Diagnostic laboratories	
<p>Note: The number of workplace clinics is only a rough estimate, based on information in Bitran, Brewster, and Ba 1994, 14.</p> <p>Source: Osmanski et al. (1991, 27-30); World Bank (1992b, 4-5; 1993b, 60); COPHASE (1994); BA (1994, 12).</p>				

4.1.1.2 Workplace Facilities⁷

The formal private and parastatal work force is very small in Senegal and has actually been shrinking in recent years. In 1987 the formal private sector employed only about 51,000 (31,000 in industry and 20,000 in services) and accounted for 2.2 percent of total employment (Osmanski et al., 1991, 38). Parastatals employ another 1 percent of the workforce (about 20,000 to 30,000 employees). Employers with 450 or more employees are required to retain the services of a permanent physician (Dieng and Barlow, 1991, 58). In addition, many employers provide health services to their employees through the operation of on-site clinics. Among the private and parastatal employers providing health services are the mining industry (serving 9,000 people), the sugar company (CSS) in Richard Toll (serving 8,000), the electric company (SENELEC), the water company (SONEES), the public bus company (SOTRAC), and the postal service (OPTS) (Du Moulin and Lagacé, 1990, 8).

On-site company health facilities range from one-room first aid stations to full-scale hospitals (e.g., the full-scale hospital run by the parastatal sugar company at Richard Toll). Such on-site facilities vary widely in the services they provide to employees.

4.1.2 For-Profit Sector

The for-profit health sector consists of one private hospital and several clinics; physicians in private practice; private dispensaries and health posts; pharmaceutical producers, distributors, pharmacies, and illegal drug vendors; and practitioners of traditional medicine.

4.1.2.1 Commercial Providers

Commercial health provision is limited to individual and private practitioners and small clinics, located mostly in Dakar. In 1991 (the most recent year for which published estimates are available), there were 25 private polyclinics providing ambulatory care, general hospitalization, and obstetrical care, 19 of which were located in Dakar (Osmanski et al., 1991, 29). In addition, there were 47 private for-profit health posts and 32 infirmaries, many of which are owned and operated by nurses and nurse-midwives. In 1989 there were 150 physicians and 16 nurse-midwives in private practice, about three-fourths of whom practiced in Dakar (most of the rest were in St. Louis and Thiès). There are also a limited number of unemployed physicians (about 60 in 1991) and an unknown number of public sector providers who operate private practices after hours (Osmanski et al., 1991, 41). Although such moonlighting (*travail au noir*) is illegal and was investigated in a

⁷ Although many of these facilities are owned and operated by for-profit firms, they are placed in the nonprofit part of the typology because the health service delivery units themselves are usually not run on a for-profit basis. They are also classified as nonprofit providers in the 1989 National Health Policy (Ministère de la Santé Publique, 1989, 15).

1989 report, no steps have been taken to curtail it (Ba, 1994, 18). One explanation offered is that university professors, who are very influential, are among the most flagrant violators.

Prices for private medical services tend to be high (the average physician consultation cost about \$30 in 1987), so that they are not easily afforded by the majority of Senegalese (Osmanski et al., 1991, 40). Commercial providers are also oriented mainly to curative, as opposed to preventive, care. Private medical practitioners are organized into professional associations, the most influential of which is the physicians' *Conseil de l'Ordre des Médecins*.

4.1.2.2 Pharmaceutical Sector

The private pharmaceutical sector in Senegal includes three local pharmaceutical manufacturing companies (Parke-Davis, SIPOA, and VALDAFRIQUE), which collectively supply about 10 percent of the pharmaceuticals consumed in the country. There is a distribution network consisting of four major importers/wholesalers (Laborex, Sodipharm, CPHASE, and UPIA), 247 private pharmacies (49 percent of which are located in Dakar), and about 250 drug depots (village pharmacies), which are gradually disappearing) (Osmanski et al., 1991, 37; CPHASE, 1994; Ba, 1994, 12). The system distributes about 2,200 different products, 70 of which are made locally. Although the cost of an average prescription tends to be quite high (3,170 CFAF in 1987), the consumption of pharmaceuticals remains high. Total private sector sales of drugs are reported to have been \$55 million in 1993 (about \$7 per capita) (CPHASE, 1994).

Although the private pharmaceutical distribution system functions pretty well, it is heavily concentrated in Dakar and environs and in a few other large towns such as St. Louis and Thiès. The GOS controls the location of pharmacies through its licensing procedures. Until recently, a new pharmacy was required to be at least 2,000 meters from any existing pharmacy (the minimum distance is now 1,000 meters). The GOS does not permit pharmacists to employ other pharmacists. Since 1981, when the GOS stopped hiring pharmacists, the number of unemployed pharmacists has grown steadily. Retail margins are also controlled by the GOS, and they are lower for certain essential drugs ("social drugs" or *médicaments sociaux*), with the effect that retailers have little incentive to stock these drugs (World Bank, 1993b, 63; Ba, 1994, 13).⁸

The January 1994 devaluation of the CFAF had resulted in retail price increases of 49 percent by April 1994, which reduced sales at the pharmacy level by 38-65 percent (CPHASE, 1994). Since then the GOS has intervened by negotiating a 10 percent reduction in producer prices, by suspending import duties and other taxes on pharmaceuticals, and by reducing the maximum allowable wholesale margin from 10 percent to 6 percent and the allowable retail margin from 33 percent to 28 percent (Ba, 1994, 24). Although these measures succeeded in containing price increases, it is clear that the devaluation—which adversely affected both prices and real incomes—has had a strong negative impact on the demand for pharmaceutical products and on the

⁸ The profit margin for normal drugs is currently 28 percent, whereas it is only 9 percent for "social drugs." Pharmacists would like the social drug list to be suppressed (Ba, 1994, 13).

financial condition of pharmacies and wholesalers (COPHASE, 1994; Perrot, 1994; Ba, 1994). At the same time, the devaluation has stimulated the local pharmaceutical industry and greatly accelerated a changeover to pharmacy-packaged generic drugs (COPHASE, 1994).

In addition to the legal market, there is also an expanding “black market” for mostly smuggled and illegal drugs (Ba, 1994, 9). According to one estimate, the quantity of drugs sold illegally was greater than that distributed by the public health system (Fassin, 1988, 106).

4.1.2.3 Diagnostic Laboratories

There are 14 diagnostic laboratories, 11 of which are located in Dakar. The largest and most sophisticated by far is the Institut Pasteur. The others provide a fairly uniform set of basic diagnostic services (Ba, 1994, 12).

4.1.3 Traditional Medicine

Traditional practitioners, both healers (*guérisseurs*) and birth attendants (*matrones*), are an important component of the private sector. It has been estimated that 90 percent of the population uses the services of a traditional practitioner at one time or another (Pillsbury, 1990, 16). They are widely distributed around the country and therefore for much of the population are more accessible than modern practitioners, in addition to being more affordable and culturally acceptable. Traditional practitioners are also widely utilized in urban areas.

Traditional health practitioners are not regulated in any way by the GOS. Although some efforts have been made to organize them and to involve them in various health projects, they have not yet been successfully integrated into primary health care systems. One stated objective of the 1989 National Health Policy was to develop laws and regulations related to the practice of traditional medicine (Pillsbury, 1990, 16). Traditional practitioners represent a potentially valuable resource in such areas as distribution and motivation of contraceptives and ORS, as well as in the prevention and treatment of sexually transmitted diseases (STDs).

4.1.3.1 Traditional Healers

Traditional healers are often healers of first resort in many rural villages. Although there are no estimates of their number, a recent study in the Fatick region enumerated about 400 traditional healers (Finch, 1992). If they are similarly distributed throughout Senegal (at 1 per 1,365 persons), there would have been approximately 5,500 traditional healers in 1992. Some traditional healers are generalists, whereas others specialize in such tasks as bone-setting and treating specialized illnesses (e.g., venereal disease, leprosy). Some traditional healers restrict treatments to herbal medicines, whereas others use primarily religious or spiritual treatment, and many combine both approaches. Many *marabouts* (religious leaders) are also healers, and even modern health workers have been

observed wearing their talismans and amulets (*gris-gris*) while on the job (Pillsbury, 1990, 17). In some health projects (notably the Pikine Project supported by the Belgians), efforts have been made to integrate the work of traditional healers into the modern health sector (Pillsbury, 1990, 17). It is safe to say, however, that insufficient attention has been paid to traditional healers given the fact that as much as 60 percent of the population is unserved by the modern health system.

Of 645 patients interviewed in the HFS public and private sector facility surveys, 120 (18.6 percent) responded that they had visited a traditional healer at some point during the past 12 months, and 92 (14.2 percent) responded that they had visited a traditional healer for their illness prior to coming to the facility at which they were interviewed. The respondents indicated that they had made a total of 413 visits to traditional healers during the past 12 months—an average of 3.4 visits per consultant and 0.6 visits per respondent overall. The proportion of patients who had visited traditional healers and the average number of visits per consultant, varied significantly between patients interviewed at public sector and private facilities (25.8 percent of public sector consultants versus 12.4 percent of private sector consultants; 3.0 visits per public consultant versus 4.2 visits per private consultant). Assuming that the tendency to use private sector facilities is positively related to income, one possible interpretation of these findings is that whereas the propensity to visit traditional healers is inversely related to income, the number of visits made to a traditional healer by those who do use them is directly related to income.

A recent USAID-funded study of traditional healers was carried out in the Fatick region of Senegal (Finch, 1992). It included a survey of 376 traditional healers practicing in the region.⁹ In addition, a sample survey was conducted of 502 residents of 29 villages in the same region. Both surveys were carried out between December 16, 1991, and February 25, 1992. Some of the more interesting findings of the provider survey are (Finch, 1992):

- ▲ The mean age of traditional healers (17 percent of whom were female) was 60. However, many of the healers had apprentices, who are not considered to be healers until they take over the practice upon the death of their master. Most of the healers (88 percent) indicated that they had learned their art from an older family member, starting their apprenticeships at a mean age of 20.
- ▲ Only 12 percent of the surveyed healers practiced medicine as their primary occupation; most were also farmers. However, about 80 of them also worked part-time in a clinic operated by their professional association. The clinic was open every day and was staffed by at least four healers at all times.
- ▲ None of the healers interviewed lived within a radius of 20 kilometers of a pharmacy or a modern health facility. The closest health facility to the respondents was a dispensary (74 percent) or a health hut (25 percent).

⁹ All healers interviewed were members of the Fatick Association of Traditional Healers (*Association des Guérisseurs de Malango (Fatick)*), only six of whose members refused (or were ineligible) to participate in the survey. The total number of healers in the region was estimated to be about 400 by the same study.

- ▲ Almost all healers reported that they were knowledgeable about the use of plants (93 percent), incantations (90 percent), special foods and beverages (82 percent), and numerous other treatments (e.g., other natural products, steam inhalations, special baths, animal products, massage, clairvoyance).
- ▲ Most of the healers (71 percent) demanded payment in advance. Of their most recent patients, most paid in cash (85 percent), but 3 percent paid in kind, another 3 percent promised to pay after their treatment had been completed, and 8 percent did not pay (5 percent were considered too poor to pay).
- ▲ Although the respondents considered themselves able to treat a variety of physical illnesses (e.g., diarrhea, migraines, STDs), most of the illnesses for which treatment was sought were psycho-spiritual in character. Many healers (36 percent) reported that they had referred patients to modern health facilities, but only 11 percent reported having had patients referred to them by such facilities.

The population survey of Fatick residents, in addition to confirming most of the information collected in the provider survey, also produced a number of interesting findings (Finch, 1992):

- ▲ More than two-thirds of the persons interviewed (69 percent) reported that they visited traditional healers frequently; only 14 percent reported never doing so.
- ▲ Most patients (70 percent) reported having received medicinal plants as their primary treatment.
- ▲ Most patients (90 percent) were satisfied with their treatment, with 65 percent reporting that they had been cured and another 25 percent reporting that their condition had improved. By comparison, of the 95 percent of respondents who had also been seen by a modern physician, only 79 percent reported that they had been cured or helped.
- ▲ Respondents indicated that there are some health problems that a traditional healer could not treat effectively (e.g., conditions requiring surgery, open wounds). However, they also indicated a belief that modern medicine is ineffective in treating psycho-spiritual problems.
- ▲ Almost all respondents (94 percent) were in favor of preserving traditional medicine, and 88 percent indicated that it ought to have official standing.

4.1.3.2 Traditional Birth Attendants

In Senegal, the term *matrone* is often used to denote both traditional birth attendants (TBAs) as well as village birth attendants trained by some project (e.g., the UNICEF project in Sine Saloum in the early 1970s). Not much is known about TBAs, their number, or the role they play in maternal and child health care. However, the Senegal Maternal Mortality survey found that TBAs assisted in 22 percent of home births and *matrones* in 15 percent (Pillsbury, 1990, 18).

4.1.3.3

Self-Treatment with Traditional Medicines

In addition to traditional practitioners, the population often treats itself with a rich array of traditional remedies, including rath, sindiegne, kel, kindeliba, bissap, dankh, feuilles de goyave, xorom-pole, and nim. Even in urban areas and among the educated and those with health insurance, traditional medicines are widely used to treat such symptoms as headaches, parasites, fatigue, and diarrhea. They are also often used to treat chronic illnesses such as rheumatism, diabetes, and asthma. The definitive research on traditional Senegalese pharmacopeia was carried out over a 30-year period by Professor J. Kerharo of the School of Medicine in Dakar (Pillsbury, 1990, 18-19).

4.1.4 Health Insurance

There are three different types of health insurance in Senegal (Du Moulin and Lagacé, 1990, 15-16):

- ▲ Public employees, retirees, and their families are covered by a program administered by the Ministry of Finance, which reimburses 80 percent of covered health care costs of employees and their families. Covered services include hospitalization, ambulatory care, and diagnostic services—but not drugs. About 400,000 people were covered in 1991. In addition, civil servants are also given free access to public sector facilities, and a limited number (about 30 annually) have the costs of medical evacuation to France covered (World Bank, 1992b, 20).
- ▲ Some private employers provide private health insurance to managerial and professional staff members and their families. In some cases, the employer pays the full costs of the employee's premium; in others, the employer and employee share the cost of the premium; and in still others, the employee pays the full cost of the premium. Benefits vary considerably, as do reimbursement levels, which average 80 percent of costs. There is no information on the number of employees covered. In addition, some employees purchase supplemental health insurance to obtain reimbursement of costs not covered by their other insurance programs.
- ▲ In 1975, Senegal enacted legislation requiring all economic enterprises either to form or to participate in an employer-based insurance scheme called an *Institut de Prévoyance Maladie* (IPM). Firms with more than 100 employees are required to form their own IPM; smaller firms must either join together to form an IMP or join an existing IPM (Dieng and Barlow, 1991, 61). IPMs are financed by matching contributions from employers and employees equal to 6 percent of the employee's salary, up to a maximum of 3,600 CFAF per month (about \$15). The plans cover employees and their families, with reimbursement levels at about 60 percent for ambulatory care and 70 percent for drugs. Although participation is mandatory, it is not enforced. It has been estimated that only about one-fourth of salaried workers are actually covered by IPMs and that less than 10 percent of the population is covered, with most of those covered residing in or about Dakar. A separate system (IPRES)

covers about 60,000 retired workers and their families. Approximately 445,000 persons are covered under IPM and IPRES schemes (World Bank, 1992b, 20). The IPM program is managed by the Ministry of Labor and has experienced serious financial difficulties, including bankruptcies, reductions in benefits, and delays in reimbursements of providers. Some of the underlying reasons for these financial problems are that 1) premiums are not based on actual loss experience; 2) some high-paid employees are exempt; 3) there is no risk-sharing between the plans (reinsurance); 4) there is widespread abuse (e.g., participants obtain reimbursement for uncovered friends and relatives); and 5) providers' prescription practices are excessive.

In addition, the existence of informal risk-sharing schemes (*tontines*) throughout Senegal has been noted in one World Bank report (1992b, 21). These are community savings pools from which contributing members can draw if needed—for example, in the event a member (or relative) requires costly medical care.

In summary, a relatively small share of the population, comprised of salaried workers and their families, is covered by health insurance. Given the small and diminishing size of the salaried labor force, there are probably only limited short-term prospects for growth in private health insurance coverage. In addition, as recognized in a recent World Bank report (1992b, 26), the overall impact of health insurance on access to health services is unclear: while health insurance clearly improves the access to care of the insured and stimulates demand for private services, it also can have negative consequences. Specifically:

- ▲ Utilization tends to be much greater among the insured population than among the uninsured. Where publicly provided services are heavily subsidized, as in Senegal, the insured (who tend to be relatively well off) may capture an even higher share of public subsidies. This tendency will be greater to the extent that private physicians gain favored access to public facilities for their patients and autonomous hospitals compete for revenue-generating patients.
- ▲ The increased demand for services on the part of the insured may result in price increases, particularly in the private sector. The effect of higher prices will be to restrict the access of the uninsured to private services.

4.2 OVERALL PERFORMANCE OF THE PRIVATE SECTOR

4.2.1 Utilization

The 1991-92 World Bank–sponsored Survey on Priorities (ESP) interviewed a national sample of 10,000 households (86,000 individuals). The ESP asked each respondent whether s/he had been ill at any time during the 30 days preceding the interview. Eighteen percent of the respondents reported having been ill (Sadio, 1994, 13). Of those reporting illness, 39 percent sought no care outside the home. Of those who did seek care (61 percent), more than half sought care at MOPHSA health posts, while another quarter sought care at a MOPHSA hospital or health center. Most of the remaining one-quarter sought care from various private sector providers (*Exhibit 4-2*).

EXHIBIT 4-2 SOURCE OF FIRST CONSULTATION	
Facility Type	Percent
MOPHSA Hospital/Health Center	24.6
MOPHSA Health Post/Dispensary	50.5
Catholic/NGO Facility	7.8
Private Physician	4.8
Workplace Facility	3.1
Traditional Healer/Marabout	6.4
Private Pharmacist	0.5
All Other	2.2
TOTAL	100.0
Source: 1991-92 ESP (Sadio, 1994, 30)	

The ESP also asked respondents the number of visits they had made to all types of health facility for any reason during the preceding 30 days. Although the overall average was 0.22 per person (corresponding to 2.64 visits per year), there was considerable variation with respect to the respondent's place of residence (0.26 visits per urban resident versus 0.19 rural), whether the respondent had been ill (1.18 visits if ill, 0.01 if not), and the respondent's level of education (0.22 for primary education or less versus 0.29 for secondary or more). The low rate of visits for those who were not ill is indicative of low rates of utilization for preventive health care (Sadio, 1994, 17).

Recent data collected by the HFS Project suggest that private sector performance compares quite favorably with that of the public sector in terms of utilization levels, costs, efficiency, quality

of care, and sustainability (Bitran, Brewster, and Ba, 1994a; 1994b). Four types of private sector facilities (Catholic health posts, workplace clinics, for-profit clinics, and other nonprofit private clinics) were included among 57 facilities surveyed in 1992, and the data referred to FY 91 (July 1990–June 1991). Utilization rates were highest among Catholic health posts, which averaged 27,000 visits of all types per annum (the four posts in Dakar averaged 75,000 visits). Their levels of utilization compared very favorably to MOPHSA health centers and health posts, which averaged 34,000 and 12,000 visits, respectively, in the HFS survey of public sector facilities. Workplace clinics, for-profit clinics, and other nonprofit private clinics (e.g., Red Cross, Muslim) averaged 16,000, 4,000, and 9,000 visits per year, respectively.

4.2.2 Costs and Efficiency

The HFS private facility survey found that total facility costs varied greatly across different categories of private provider. For-profit and workplace clinics consumed the most resources, with average annual costs per facility (excluding depreciation) of 85 million CFAF (\$314,000) and 70 million CFAF (\$259,000), respectively. In contrast, Catholic health posts and other nonprofit clinics had total costs of 8.6 million CFAF (\$32,000) and 7.7 million CFAF (\$29,000), respectively. By comparison, 18 MOPHSA health centers and 36 health posts had average total costs of 47 million CFAF (\$174,000) and 4 million CFAF (\$15,000), respectively.

It is important to note that the structure of costs differed significantly between public and private facilities. Personnel costs among surveyed private sector facilities averaged about 40 percent of total costs, compared to 80 percent at MOPHSA health centers and health posts. (The cost structure for other nonprofit facilities resembled that of public facilities.) Drug costs averaged 28 percent of total costs in both Catholic health posts and workplace clinics; 12 percent for for-profit clinics; and only 9 percent and 16 percent, respectively, for MOPHSA health centers and health posts. Other costs (e.g., supplies, utilities) averaged more than 25 percent of total costs in Catholic health posts, workplace clinics, and for-profit clinics, compared to only 9 percent in MOPHSA health centers and health posts. These data on the structure of costs suggest that the private sector is more efficient in the way it combines resources than the public sector, where personnel costs dominate, and that, as a consequence, the quality of care may be higher in the private sector.

In order to gain a clearer indication of overall efficiency, it is necessary to examine measures of cost and output simultaneously, as well as measures of labor productivity (i.e., output per unit of labor input). It is difficult to make comparisons of cost per unit of output across all four categories of private providers in the HFS provider surveys because two categories (for-profit and other nonprofit clinics) combine the costs of inpatient and outpatient services. However, among the remaining, exclusively outpatient categories, Catholic health posts have a cost per visit of 298 CFAF (\$1.10), compared to 304 CFAF (\$1.13) among MOPHSA health centers and health posts surveyed. Workplace clinics exhibit a much higher average cost per visit (4,287 CFAF, or \$15.88).

Although it would at first appear that Catholic and MOPHSA health posts are equally efficient, with cost per visit of around 300 CFAF, their respective cost structures suggest otherwise.

Non-personnel costs (medicines, supplies, and other inputs) account for over half of costs at Catholic health posts, compared to only about 20 percent of costs at MOPHSA health post costs. This suggests that the former are producing a higher-quality output (for which, as the HFS survey shows, they are able to charge a price approximately twice as high) due to higher labor productivity.

4.2.3 Quality of Care

In order to measure quality of care, the HFS public and private sector facility surveys collected information on: 1) availability of drugs and medical supplies; 2) medical staff compliance with clinical standards of treatment; and 3) patient and staff perceptions of quality of care. The findings on quality of care were as follows:

- ▲ Private providers were generally well stocked with drugs and medical supplies (as their cost structures would suggest). Catholic health posts and for-profit providers did not experience any stock-outs. In contrast, public sector facilities experienced frequent stock-outs during the same period, particularly of vaccines, chloroquine, and ORS. For example, over 60 percent of all MOPHSA health centers experienced stock-outs of ORS and vaccines at some time during FY91. Stock-outs of supplies (e.g., alcohol, cotton, syringes) were also common in public sector facilities.
- ▲ University-trained nurses measured the degree of provider compliance with treatment norms in both public and private facilities. The highest rates of compliance were among for-profit providers. Compliance rates among the other three types of private providers were relatively poor but similar to those in the public sector.
- ▲ As they left the surveyed facilities, patients were asked to rate the quality of care according to a series of indicators. In general, patients were satisfied with the services they received in both public and private facilities. At private sector facilities, well over 90 percent of patients expressed general satisfaction with the quality of care and said that they would come back.
- ▲ Staff members in private facilities tended to rate the quality of care in their facilities as “good.” Staff perceptions were most favorable in for-profit facilities (93 percent “good”) but were also high at workplace clinics and Catholic health posts (74 percent and 79 percent, respectively). The exception among private facilities was other nonprofit clinics, where only 26 percent of staff members rated the quality of care as “good.” Staff members in government facilities were not so positive. The highest rating among MOPHSA facilities were for health posts (33 percent “good”).

4.3 PRIVATE SECTOR CONTRIBUTIONS TO THE PUBLIC HEALTH AGENDA

Certain types of health services, sometimes called public health activities, require varying degrees of public intervention. Public health activities all share the common attribute that private markets would produce too little of them in the absence of government intervention. These include: 1) traditional public health goods (those that are difficult to charge a price for), such as water and sanitation and vector control; 2) services involving externalities (for which the social benefits and costs differ from the individual benefits and costs), such as communicable disease control; and 3) merit goods (health services that people consume too little of due to a lack of information), such as family planning, immunization, and other forms of preventive care. Despite the need for public intervention in these activities, the private sector can still play an important role in public health activities:

- ▲ The private sector can increase access to public health goods and services in areas under served by the public sector.
- ▲ The private sector can provide public health goods to some segments of the population that are willing and able to pay for such services.
- ▲ The private sector may be able to provide public health goods more efficiently than the public sector, possibly with public subsidies.

In Senegal, the private sector plays only a limited role in providing public health services. Although nonprofit private sector facilities typically provide a full range of preventive services (with the exception of Catholic health posts, which do not provide contraceptives), the proportion of preventive care to the total care provided by these facilities tends to be lower than for public ambulatory facilities. For example, according to data collected in the HFS surveys of public and private sector facilities, preventive visits accounted for 11 percent of all visits in Catholic health posts but for 33 and 34 percent, respectively, of all outpatient visits in public health centers and health posts (Bitran, Brewster, and Ba, 1994a; 1994b). For six of the private for-profit facilities surveyed, vaccinations were the only preventive service offered, accounting for only 8 percent of all outpatient visits.

One reason for the relatively minor role played by the private sector in providing public health services is that most of the rural population (60 percent of the total) has no ready access to private facilities other than drug depots (*Exhibit 4-3*). Data from the 1992/93 DHS suggest the importance of proximity to health facilities as an important determinant of utilization. For example, among rural mothers giving birth during the five years preceding the DHS, 60 percent of those who received prenatal care and medical assistance during delivery lived within 5 kilometers of a health facility that provided these services, compared to only 42 percent of mothers who did not receive one of these services. Similarly, 58 percent of the children born during the same period who completed their vaccinations lived within 5 kilometers of the nearest health center offering maternal and child health (MCH) services, compared to 43 percent of children who received no (or incomplete) vaccinations (Ndiaye, Diouf, and Ayad, 1994, 182).

EXHIBIT 4-3 DISTRIBUTION OF DISTANCE FROM RESIDENCE TO PRIVATE HEALTH FACILITIES (percent)						
Type of Facility	Place of Residence	Distance (kilometers)				Total
		0-4	5-29	30+	NR	
Private hospital	Urban	74	14	11	2	100
	Rural	1	19	79	2	100
Private Physician/ Dispensary	Urban	76	11	7	6	100
	Rural	3	32	62	3	100
Pharmacy	Urban	99	1	0	0	100
	Rural	10	42	47	1	100
Drug Depot	Urban	8	31	7	53	100
	Rural	37	50	5	9	100
Source: 1992/93 DHS (Ndiaye, Diouf, and Ayad, 1994)						

Another factor that may constrain the role of the private sector in providing public health services even to the urban population is the attitude of the country's medical establishment to provision of such services. The professional organization of physicians (the *Conseil de l'Ordre des Médecins*) has opposed allowing paramedics to provide some types of public health services, particularly those traditionally performed by physicians (Osmanski et al., 1991, 48). For example, the Conseil opposes allowing nurses and midwives to provide some types of family planning services and favors strict controls over dispensation of oral contraceptives. Some private physicians have also favored focusing exclusively on curative care, and they have also opted to provide relatively high-priced services to a small segment of the population.

These attitudes are reflected in the responses provided by some private physicians who were asked to suggest measures the GOS could take to encourage provision of preventive care by the private sector. Five physicians (out of 57 respondents) expressed the view that preventive care was the sole responsibility of the government.¹⁰ However, it is important to point out that a larger number of respondents (11 of 57) suggested that the government subsidize the provision of preventive services in one way or another. Other respondents suggested that physicians (particularly specialists) should be required to donate a certain amount of time (e.g., one day per week, two weeks per year) to the public sector.

¹⁰ The actual responses (translated from French) were as follows: 1) "[preventive care] should be the role of the public sector, along with endemic diseases; whereas the private sector should concentrate on individual curative care" (male gynecologist in private practice, age 34); 2) "[preventive care is] the role of government" (male pediatrician in private practice, age 65); 3) "[the] public sector needs to do things such as vaccination and health education" (female cardiologist in private practice, age 38); 4) "[preventive care is] not the role of the private sector" (female pediatrician working in a private clinic, age 32); and 5) "private practitioners do not really have the time for this—best to leave it to the government" (male surgeon in private practice, age 40).

4.3.1 Reproductive Health Services

4.3.1.1 Family Planning

Population growth in Senegal continues to be very rapid, at 2.8 to 3.2 percent per year. The current population is estimated at about 8 million, up from 6.9 million at the 1988 census, and it is projected that the population will be almost 10 million by 2000. Although mortality rates have been declining for some time, fertility rates remain high. According to the 1992/93 DHS, the total fertility rate is 6.0, compared to 6.62 in 1986 and 7.15 in 1978 (Ndiaye, Diouf, and Ayad, 1994, 30). Contraceptive prevalence (modern methods) was 2.4 percent at the 1986 DHS and had increased to only 4.8 percent at the 1992/93 DHS.

There are several reasons for low levels of contraceptive use in Senegal:

- ▲ Knowledge of modern contraception is limited. The best known modern method is the pill, which is familiar to 63 percent of Senegalese women (Ndiaye, Diouf, and Ayad, 1994, 40). However, only 36 percent of all women, and only 34 percent of married women, knew a source for the pill.
- ▲ Demand is weak. According to the 1992/93 DHS, the average ideal number of children among married women who gave numeric responses is 6.3 (compared to the current total fertility rate of 6.0). Sixty-two percent of women do not intend to use contraception in the future (40 percent because they want more children).
- ▲ Women's status is relatively low. Few women are educated (the female literacy rate is only 19 percent). Most women marry young (the median age at marriage is 16), and husbands are, on average, 14.4 years older than their wives. Marriage is fairly unstable, due to death and divorce, but remarriage is common. Polygamy is widely practiced (47 percent of currently married women are in a polygamous union).
- ▲ There are marked differences between husbands and wives in desired fertility. According to findings from the 1992/93 DHS male questionnaire, the desired number of children among males is 10.4, with 69 percent of males wanting more children than their wives. In only 4 percent of couples do both husband and wife not want no more children. Sixty-six percent of women know at least one family planning method and approve of family planning, compared to only 44 percent among men. Among married men, 78 report never having discussed family planning with their wives.
- ▲ Services are not readily available in rural areas. According to the 1992/93 DHS, only 29 percent of currently married women in rural areas lived within 5 kilometers of a source of family planning services (30 percent resided 30 kilometers or more from the closest source).
- ▲ Policy support at the top levels of the GOS has been weak. Although Senegal adopted a National Population Policy in 1988 (demanded by the World Bank as a condition for a structural adjustment loan), it has not been embraced by the GOS

leadership, and its implementation has been hindered by conservative elements in the society (Osmanski et al., 1991, 48). In particular, leaders have been unwilling to express support publicly for limiting (as opposed to spacing) births.

- ▲ Resistance to contraception on the part of a relatively conservative medical community (many of whom are Catholic, despite the fact that Catholics make up less than 5 percent of the total population) has restricted the availability of contraceptives, particularly to the rural population. A milestone was reached, however, in 1990 when MOPHSA, at the recommendation of local experts, decided to suspend requirements for laboratory tests prior to the prescription of oral contraceptives (Osmanski et al., 1991, 49; Pillsbury, 1990, 3).

According to the 1992/93 DHS, most women obtain contraceptives from the public sector. Among current users of the two most commonly used modern methods, the pill and IUD, 63 and 68 percent, respectively, reported that public sector facilities were their most recent source. Private sources, which accounted for the remainder, included clinics (9 percent of pill sources, 25 percent of IUD sources), pharmacies (17 percent of pill sources), and private physicians (6 percent of pill sources, 5 percent of IUD sources). It has been estimated that, as the number of USAID- and UNFPA-supplied contraceptives increased during the late 1980s, the commercial share of the contraceptive market fell from almost half in 1985 to slightly more than a quarter in 1990 (Osmanski et al., 1991, 63).

As mentioned, ASBEF (the IPPF affiliate) operates two family planning clinics, a Model Family Planning Clinic in Dakar and a smaller clinic in Louga. As is the case for other model clinics in the early stages of a family planning program, the Dakar clinic sets an important example for the entire country by providing high-quality family planning service delivery and women's health services.

Catholic health posts offer a range of curative and preventive health services, including counseling in natural family planning, but they do not provide other types of family planning services. The fact that the Catholic Church is the largest private provider in rural areas further limits the capacity of the private sector to provide family planning services.

USAID has assisted some providers of family planning services through the *Volet Secteurs Privé et Para-public* (VSPP) of the 1987-92 *Projet Santé Familiale* (PSF). The purpose of VSPP was to establish family planning service delivery within the workplace facilities of private and parastatal employers, but it has also assisted private practitioners, laboratories, and pharmacists (Osmanski et al., 1991, 42-43). By 1989, VSPP had worked on 40 family planning service delivery activities, with 26 organizations in six regions. In June 1989, VSPP organized a joint conference of MOPHSA and the National Association of Pharmacists which brought together 60 pharmacists from all regions of the country. The conference endorsed strengthened information, education, and communication for family planning and child survival, as well as the social marketing of condoms and ORS. One outgrowth of the conference was that the GOS decided to remove tariffs on imported condoms.

The fact that the most popular contraceptive methods are supply methods (particularly the pill) suggests that private sources (particularly pharmacies) may be able to play a larger role in family planning in the future. However, despite the fact that at least 12 brands of oral contraceptives are marketed in Senegal, prices tend to be relatively high (e.g., in 1991, the least expensive oral contraceptive was priced at about \$1.35). Moreover, the distribution network is pretty much limited to Dakar, its environs, and a few of the larger towns.

There are a variety of condoms on the market, but these also tend to be relatively expensive (about \$1 per unit in 1991, although prices of \$0.20 were found on the black market). At present, condoms can be marketed only in pharmacies, although enforcement of this regulation has been somewhat relaxed (Osmanski et al., 1991, 44). Tariffs on imported condoms were removed in 1990 (they had been at 60 percent), but there was little evidence of price decreases. A pilot social marketing project for condoms was to be launched in November 1994 (discussed below, under STDs/AIDS).

The only injectable contraceptive available in pharmacies in 1991 was Schering's Noristerat, which sold for about \$ 1.00 per unit, but sales were minimal. NORPLANT is currently available only from MOPHSA, on an experimental basis.

4.3.1.2 Maternal and Perinatal Services

As mentioned, Senegal has very high rates of maternal and neonatal mortality. Prenatal care and medically assisted deliveries can contribute significantly to attenuating both types of mortality. According to data from the 1992/93 DHS (Ndiaye, Diouf, and Ayad, 1994, 85-88), 74 percent of pregnant women currently receive prenatal care from either a physician (5 percent) or a nurse-midwife (68 percent), up 16 percent from the 1986 DHS. Again, however, there are important differentials according to place of residence (63 percent rural versus 94 percent rural) and mother's level of education (69 percent among women with no education versus 94 percent among women with primary education and 98 percent among women with secondary or higher education). It is also important to note that only 13 percent of women received four or more prenatal visits, as recommended by WHO, and that the median duration of pregnancy at the time of the first prenatal visit was 3.9 months.

A significant number (5 percent) of pregnant women seek prenatal care from traditional birth attendants (TBAs)—the same percentage that receive such care from physicians. This number is higher among women in rural areas (7 percent versus 1 percent in urban areas) and among women with no education (6 percent versus 3 percent among women with primary education and 1 percent among women with secondary or higher education) (Ndiaye, Diouf, and Ayad, 1994, 86).

According to a recent health sector assessment, anemia is possibly the most common medical problem associated with pregnancy in Senegal (Osmanski et al., 1991, 14). In 1985 at the Kaolack hospital, for example, 38 percent of pregnant women seen were diagnosed as anemic. Almost 6 of 10 women interviewed in a 1988 Maternal Mortality Study responded that they considered pallor

to be a normal sign of pregnancy. Anemia can be treated both with iron fortification and supplementation, and social marketing could provide an effective mechanism for implementing such a program.

Anti-tetanus vaccinations are an important measure to reduce neonatal mortality. According to the 1992/93 DHS (Ndiaye, Diouf, and Ayad, 1994, 88-89), 70 percent of mothers giving birth during the five-year period preceding the survey received anti-tetanus vaccinations, 75 percent of whom received two or more doses (two doses are required for a first pregnancy, after which one suffices). Seventy-three percent of women possessed a *carnet prénatal* at the time of the survey. However, important differentials exist with respect to place of residence (62 percent rural versus 94 percent urban), region of residence (56 percent in the Northeast versus 93 percent in the West), and mother's education (68 percent among women with no education versus 94 percent among women with primary education and 98 percent for women with secondary or higher education).

More than half of Senegalese women (53 percent) still give birth to their children at home, and more than half of these (28 percent of all births) are attended by a TBA. (The remaining home births either are assisted by a friend or relative or are unassisted.) Forty-seven percent of births occur in a health facility, with most of these (45 percent of the total) attended by a nurse or nurse-midwife. (Only 2 percent of all births are attended by a physician.) There are marked differentials in the number of deliveries in a health facility according to:

- ▲ place of residence (29 percent of rural births versus 81 percent of urban births);
- ▲ region (31 percent of births in the Northeast versus 70 percent in the West);
- ▲ mother's education (39 percent among women with no education versus 77 percent among women with primary education and 93 percent among women with secondary or higher education); and
- ▲ whether prenatal care was received (10 percent among women receiving no prenatal care versus 66 percent among women with four or more prenatal visits).

4.3.2 Communicable Diseases

4.3.2.1 Immunization

Since 1981-82 MOPHSA has conducted annual vaccination campaigns to vaccinate young children against measles, diphtheria, tuberculosis, whooping cough, tetanus, and polio. However, a recent health sector assessment questioned whether there should be an emphasis on immunization campaigns to the neglect of developing routine immunization capabilities at the health post level (Osmanski et al., 1991, xv). Current policy emphasizes the integration of all vertical programs into the primary health system.

According to data from the 1992/93 DHS, 64 percent of children between 12 and 23 months of age have *cartes de vaccinations*, up from only 24 percent at the 1986 DHS (Ndiaye, Diouf, and Ayad, 1994, 95). Forty-nine percent of children 12 to 23 months of age received all required vaccinations. Again, however, there are marked differentials according to place of residence (40 percent rural versus 65 percent urban), region (33 percent in the Northeast versus 62 percent in the West), and mother's education (44 percent among women with no education versus 67 percent among women with primary education and 89 percent among women with secondary or higher education). Unfortunately, the 1992/93 DHS did not collect information on the source of vaccinations (e.g., private versus public).

4.3.2.2 Diarrhea

Diarrhea is the leading cause of mortality and morbidity among pre-school-age children in Senegal. According to data from the 1992/93 DHS, 21 percent of children 0 to 4 years of age had diarrhea at some point during the two-week period preceding the survey (Ndiaye, Diouf, and Ayad, 1994, 103). The reported prevalence of diarrhea also varied by age of the child (33 percent among children 6-23 months of age, compared to 8 percent in children 48-59 months of age), place of residence (23 percent rural versus 15 percent urban), and mother's education (22 percent among children with uneducated mothers, compared to 17 percent among children whose mothers have primary education and 10 percent among those whose mothers have secondary or higher education).

Oral rehydration therapy (ORT) is the treatment of choice for diarrhea. Among mothers responding to the 1992/93 DHS, 45 percent knew about oral rehydration salts (ORS), and 31 percent reported having used them at some point (Ndiaye, Diouf, and Ayad, 1994, 104-105). Among the children aged 0 to 4 who were reported to have had diarrhea during the preceding two weeks, 23 percent were taken either to a health facility or a physician for treatment; 18 percent received either a commercial ORS preparation or an ORS solution prepared at home; and 42 percent were given additional liquids. However, 52 percent were given neither ORS nor additional liquids. In addition, 19 percent were also given an antibiotic and 34 percent were also given a traditional remedy. Again, urban mothers and better-educated mothers were more likely than rural and uneducated mothers to

take their children to a health facility or a doctor, to administer ORS, and to provide additional liquids, and were less likely to use traditional remedies. *Exhibit 4-4* shows that about three-fifths of the diarrhea cases receiving treatment were treated at public sector facilities, and only about one-fifth were treated in the private sector (the remaining fifth were treated at unspecified “other” facilities). Moreover, in rural areas, most private sector patients received care from either market vendors (5.9 percent) or traditional healers (9.5 percent).

A recent health sector assessment concluded that the national policy of promoting home-made ORS solutions while providing pre-packaged solutions through public health facilities has led to confusion among both health providers and mothers about the most appropriate treatment to pursue. In addition, there have been frequent stock-outs of the pre-packaged products (Osmanski et al., 1991, xv).

EXHIBIT 4-4 SOURCES OF TREATMENT FOR DIARRHEA IN CHILDREN UNDER AGE 5 (percent)		
	Urban	Rural
PUBLIC SECTOR		
Public Hospital	11.1	2.2
Health Center	21.4	5.1
Health Post	27.8	45.1
Community Health Work	0.8	4.7
SUBTOTAL	61.1	57.1
PRIVATE SECTOR		
Private Clinic/Hospital	6.3	5.1
Pharmacy	2.4	0.4
Private Doctor	1.6	0.4
Private Nurse	3.2	0.4
Shop/Market	0.0	6.9
Traditional Healer	7.1	9.5
SUBTOTAL	20.6	22.5
OTHER	18.3	20.4
TOTAL	100.0	100.0
Note: Responses refer to place treatment was sought for episode occurring during preceding two weeks. In some cases, more than one type of provider was visited. Source: 1992/93 DHS (unpublished tables)		

ORS is presently not available through private pharmacies. Instead, it is distributed by UNICEF through the public sector. Since the UNICEF supply falls considerably short of the

estimated need, there should be some opportunity for the social marketing of ORS through pharmacies and other retail outlets (Osmanski et al., 1991, 45). *Exhibit 4-5* shows the distribution of responses from the 1992/93 DHS by mothers of children under age 5 who were asked where they could obtain ORS. Approximately 80 percent of the sources mentioned were public sector sources in both urban and rural areas.

EXHIBIT 4-5 ORAL REHYDRATION SALTS: SOURCES MENTIONED BY MOTHERS (percent)		
	Urban	Rural
PUBLIC SECTOR		
Public Hospital	19.5	6.2
Health Center	25.6	9.5
Health Post	29.6	65.2
Community Health Work	1.9	2.8
SUBTOTAL	76.6	83.7
PRIVATE SECTOR		
Private Clinic/Hospital	1.2	0.4
Pharmacy	9.6	5.1
Private Doctor	0.8	0.1
Private Nurse	9.5	6.6
Shop/Market	0.1	1.2
Traditional Healer	0.0	0.0
SUBTOTAL	21.3	13.4
OTHER	2.1	2.9
TOTAL	100.0	100.0
Note: Respondents mentioned more than one source in some cases. Source: 1992/93 DHS (unpublished tables)		

4.3.2.3

Malaria

The 1992/93 DHS asked mothers of children aged 0 to 5 whether their children had had a fever during the preceding two weeks and, if so, whether and where they had sought care, as well as the type of treatment received. Thirty-eight percent of children were reported to have had a fever during the reference period. Among these, only 31 percent were treated either by a physician or at a health facility (Ndiaye, Diouf, and Ayad, 1994, 102). The most commonly used treatments were anti-malarials (22 percent), antibiotics (21 percent), and traditional remedies (10 percent). The tendency to seek treatment was higher among urban residents than rural residents (38 percent versus 27 percent) and among the educated (28 percent among those whose mothers had no education versus 42 percent among children whose mothers had primary education and 48 percent among those whose mothers had secondary or higher education). There was a clear tendency for urban and educated mothers to use anti-malarials and antibiotics for treatment of their children, whereas uneducated and rural mothers made greater use of traditional remedies.

A recent health sector assessment concluded that Senegal's policy of prophylactic treatment of malaria is in conflict with WHO-endorsed presumptive treatment practices, that the anti-malaria program has encountered numerous logistical problems, and that it may even have contributed to the growing prevalence of chloroquine-resistant strains (Osmanski et al., 1991, 68-69).

4.3.2.4

Respiratory Infections

The 1992/93 DHS asked mothers of children aged 0 to 5 if their child had suffered from a cough and shortened and rapid breathing at any time during the preceding two weeks and, if so, whether and where they had sought treatment and the nature of the treatment given (Ndiaye, Diouf, and Ayad, 1994, 100). Overall, 14 percent of children were reported to have had symptoms of a respiratory infection during the reference period. Of these, only 27 percent were treated either by a physician or at a health facility. The most common treatments were antibiotics (18 percent), cough syrups (20 percent), and traditional remedies (13 percent). Differentials were observed in the percentage of sick children who received treatment according to their place of residence (25 percent rural versus 32 percent urban) and their mother's education (24 percent among those whose mothers had no education versus 41 percent among those whose mothers had either a primary education and 36 percent among those whose mothers had a secondary or higher education). Antibiotics and cough syrups were used more widely by educated and urban mothers, and uneducated and rural mothers made greater use of traditional remedies.

Exhibit 4-6 provides data from the 1992/93 DHS on where those children under age 5 who had either a fever or a cough were taken for treatment. Approximately two-thirds were taken to public sector facilities in both urban and rural areas. Only about one-fifth were treated by private sector providers, more than half of whom were either market vendors or traditional healers in rural areas.

EXHIBIT 4-6 SOURCES OF TREATMENT FOR FEVER/COUGH IN CHILDREN UNDER 5 (percent)		
	Urban	Rural
PUBLIC SECTOR		
Public Hospital	16.6	3.7
Health Center	25.8	8.7
Health Post	23.9	49.7
Community Health Work	2.0	3.7
SUBTOTAL	68.3	65.9
PRIVATE SECTOR		
Private Clinic/Hospital	11.0	4.9
Pharmacy	4.5	1.9
Private Doctor	0.6	0.6
Private Nurse	0.3	2.4
Shop/Market	1.7	5.2
Traditional Healer	5.1	7.3
SUBTOTAL	23.0	22.3
OTHER	8.7	11.8
TOTAL	100.0	100.0
Note: Responses refer to place treatment was sought for episode occurring during preceding two weeks. In some cases, more than one type of provider was visited. <i>Source:</i> 1992-93 DHS (unpublished tables)		

4.3.2.5 AIDS/STDs

There are no reliable national data on the magnitude of the problem of sexually transmitted diseases (STDs) in Senegal (Osmanski et al., 1991, 15). However, MOPHSA estimates that 20 percent of all outpatient consultations are STD-related and that 60 percent of sterility is caused by STDs. Gonorrhea prevalence has been estimated at between 5 and 10 percent; syphilis at 1.2 percent; and chlamydia at 12 percent.

By the end of 1989, 269 cases of AIDS had been reported (the first six cases were reported in 1986), and a rapid increase in cases was predicted (Osmanski et al., 1991, 15). However, as in other African countries, the incidence of AIDS is undoubtedly substantially under-reported. Partly to address the growing AIDS problem, the GOS eliminated all import duties on condoms in 1990, as mentioned.

A social marketing pilot project for condoms was to be launched in November 1994 (SOMARC, 1994, 6). This pilot project is to have two phases. In phase I, packaged condoms are to be sold to all pharmaceutical wholesale distributors, who are then to sell them to all pharmacies, drug depots, and public sector distributors. Although the expectation is that the majority of condoms

will be used for disease prevention, they are to be promoted as protection against unwanted pregnancies as well. After three months, an assessment is to be conducted to determine whether condom distribution might be extended during Phase II into such nontraditional outlets as bars, hotels, and nightclubs. According to the Social Marketing for Change project (SOMARC, 1994, 5-6), which is initiating the program, the Senegalese social marketing project

“seeks to assist the Government of Senegal in achieving its preventive health and demographic goals by:

1. Creating demand for condoms through culturally sensitive efforts in public relations, and multi-media brand advertising;
2. Promoting correct use of condoms through training of pharmacy personnel and all others involved in distribution and sales;
3. Making a high quality branded condom easily available and affordable to low-income consumers through all authorized channels of distribution, with an emphasis on introduction through the private sector;
4. Increasing AIDS awareness and condom availability and use among high risk groups;
5. Developing a significant condom market through the private sector that will lead to the eventual substitution of AID-donated commodities with commercially procured contraceptives.”

4.4 COLLABORATION BETWEEN THE PUBLIC AND PRIVATE SECTORS

In Senegal, numerous measures taken by the public sector affect the private health sector, including 1) subsidies to private providers; 2) taxes and price controls; 3) direct provision and regulation of health insurance; and 4) restrictions on competition and other forms of legal and regulatory controls.

4.4.1 Subsidies

- ▲ MOPHSA pays the salaries of some staff working in Catholic health posts and provides vaccines for child immunizations. Catholic health posts also collect and report their service statistics to MOPHSA. It is interesting to note that all of the Catholic providers interviewed in the HFS survey of private sector providers emphasized the financial burden the recent devaluation imposed on drug procurement and called for GOS subsidies of drugs. Several of the Catholic

providers also requested the secondment of additional MOPHSA personnel to Catholic health posts.

- ▲ The GOS subsidizes the training of health workers, including physicians, paramedics, dentists, and pharmacists. Physicians, dentists, and paramedics are currently required to work for the GOS for five years upon completion of their training but are then free to work in either the public or private sector. In recent years, the GOS has been unable to provide employment for many graduates, and many have subsequently become unemployed. Under these circumstances, it would certainly make sense for the GOS to suspend (or at least reduce) the subsidies provided to students.

4.4.2 Taxes and Price Controls

- ▲ The GOS regulates the retail margins on pharmaceutical products (Dieng and Barlow, 1991, 64). In the wake of the CFAF devaluation, the GOS suspended all taxes on the pharmaceutical sector. As a result of this and other measures (e.g., 10 percent producer price discounts and 4 percent and 5 percent decreases, respectively, in allowable wholesale and retail margins), the retail price of imported drugs increased by only about 49 percent, instead of the 100 percent to be expected in the wake of a 50 percent devaluation. The suspension of all taxes is equivalent to a subsidy to the pharmaceutical sector of about 25 percent of retail prices.
- ▲ The GOS (through a tripartite commission) regulates the fees charged by specialists for purposes of reimbursement by IPMs. According to three respondents to the HFS private sector provider survey, these fees have not been revised for many years—apparently not since their establishment in February 1983 (Dieng and Barlow, 1991, 39).

4.4.3 Insurance

- ▲ The GOS partially reimburses the health care expenses of civil servants, which strengthens demand for private health services.
- ▲ The GOS requires all salaried workers to belong to an IPM. Many respondents to the HFS private sector provider survey indicated that most of their patients come from those insured by IPMs (in some cases, 85 percent or more). At the same time, these providers lamented the financial problems of IPMs and the fact that the insurance market was getting smaller due to numerous company failures.

4.4.4 Legal and Regulatory Controls

- ▲ The GOS requires large employers (those with more than 100 employees) to provide medical services to their employees. A few respondents to the HFS private sector provider survey said that they had lost patients as a result of this regulation (e.g., previous patients who then sought on-site services).
- ▲ The GOS does not enforce legal restrictions on moonlighting by public sector physicians. Three respondents to the HFS private sector provider survey said that such moonlighting constituted unfair competition from providers who do not have to pay taxes. Apparently, moonlighting is not limited to physicians. One private sector nurse accused a MOPHSA nurse of taking drugs home to sell during off hours.
- ▲ The GOS appears to work closely with professional associations (e.g., of physicians and pharmacists) to regulate market supply. Several respondents to the HFS private sector provider survey mentioned that the GOS would no longer give general practitioners a license to establish practices in central Dakar. The GOS has always strictly enforced a minimum distance between pharmacies. These regulations are clearly designed to maintain the income levels of established practitioners at the cost of reducing the incomes of potential competitors. They also tend to keep prices higher in some markets. The GOS should consider critically re-examine its role in limiting competition in private health service markets.¹¹
- ▲ Under the Bamako Initiative, the GOS supports establishment of revolving drug funds. The public sector pharmaceutical distributor (PNA) sells drugs at reduced cost to community health organizations (i.e., revolving drug funds). Given all of the difficulties PNA has had, it would be useful to consider opening this market up to private competition. Both pharmacists interviewed in the HFS private sector providers survey said that the Bamako Initiative had hurt their businesses. They called for GOS subsidies to make it possible for them to sell basic drugs at the same price as the community drug funds.

¹¹ However, the GOS's approach to regulating the private health sector by limiting competition is apparently a well-established feature of its approach to private sector regulation in general. According to a recent World Bank private sector assessment: "The principal constraints to the development of private sector activity in Senegal stem from the rigidities imposed by the inward-looking and highly monopolistic economic structure which emerged in the years immediately following independence" (World Bank, 1992, 14).

4.5 FACTORS AFFECTING DEVELOPMENT OF THE PRIVATE SECTOR

4.5.1 Legal and Regulatory Environment

This assessment points to a few areas where legal and regulatory reform may be needed:

- ▲ The two-tiered system of drug price controls, by which the maximum allowable markup on “social drugs” is only about one-third that on “normal drugs,” seriously limits the retail profit margin on these products, leading to stock-outs and a lack of interest among distributors in carrying the product(s).¹² If the absence of taxes on social drugs is not sufficient to keep their prices affordable, the manufacturer and/or importer could be subsidized to bring the retail price down. If anything, the allowable retail margin for social drugs should probably be higher than for normal drugs.
- ▲ Currently, only pharmacies are allowed to sell condoms. The GOS should consider lifting this restriction, permitting condom sales in a variety of retail outlets.
- ▲ As mentioned, the GOS enforces location restrictions in licensing health care providers, particularly physicians and pharmacists. Although these restrictions are undoubtedly rationalized in terms of avoiding excessive concentration of private physicians in Dakar and other large towns, they have clearly been ineffective (and are not likely to be effective) in prompting such providers to establish practices in other areas. More likely, they merely serve to keep the prices (and incomes) of established physicians higher than they would otherwise be.
- ▲ The GOS regulates the fees charged by specialists for reimbursement by IPMs, and these fees apparently have not been revised since they were issued in 1983. If maintained, they could be indexed to the cost of living. Although such price controls are definitely a second-best measure (it would be preferable for IPMS to undertake more aggressive controls through preferred provider networks or HMOs), they probably reflect an assessment of the possible adverse consequences of private health insurance on the demand for and cost of health care.

¹² The effects of the two-tier scheme are exacerbated by the fact that the wholesale price (to which the retail margin is added) of social drugs is only a fraction of the wholesale price of normal drugs, so that the absolute margin is even smaller than the relative margins would suggest.

4.5.2 Financial Environment

4.5.2.1 Competition from the Public Sector

The public sector pharmaceutical distribution system (PNA) effectively competes with private distribution channels. As the Bamako Initiative expands, community medical organizations (CMOs) will also be effectively competing with private pharmacies and drug depots, particularly in urban areas. As previously noted, pharmacists interviewed in the HFS private sector provider survey indicated that competition from CMOs had already hurt their sales.

It might appear that donor-supplied contraceptives are “crowding out” the commercial market, but over time this may not be the case. By increasing overall contraceptive use, donor-funded projects may actually serve to expand the overall size of the commercial market.

Finally, it is important to emphasize that, aside from pharmacists, most private providers do not view MOPHSA as a viable competitor. Indeed, 38 of 57 respondents to the HFS private sector provider survey expressed the view that the poor quality of MOPHSA services was the greatest single source of demand for private health services. Conversely, one might expect that improving MOPHSA quality of care would impact negatively on the private sector.

4.5.2.2 Public Subsidies

As noted, medical training is heavily subsidized by the public sector, which provides scholarships to most medical students. Newly trained physicians, dentists, and paramedics are required to perform five years of service in the public sector, as partial repayment of these subsidies. However, recent hiring cutbacks in the public sector have reduced enrollment and led to backlogs of graduates who are unable to perform their public service commitment (Osmanski et al., 1991, 24). Under these circumstances, the GOS should consider reducing or eliminating these subsidies.

Another possible public subsidy to the private sector concerns moonlighting by public sector physicians. Do the patients of such physicians receive extra services when they seek care in their public sector facilities? Do these physicians receive benefits from their public practices (e.g., access to equipment, facilities, or patients) that can be considered as subsidies? What benefits (if any) accrue to the public sector from such practices (e.g., lower salary costs, greater ability to retain quality staff members, higher occupancy rates in public hospitals)? A study of these relationships is definitely needed, especially in light of complaints registered in the HFS private sector provider survey about the unfair competition represented by such moonlighting.

4.5.2.3

Insurance

Health insurance coverage is limited currently to about 10 percent of the population, mostly residents of Dakar. Nevertheless, such coverage is an important determinant of the demand for private for-profit health services, as indicated by the responses of physicians in the HFS private sector provider survey. The fact that the size of the salaried work force has actually decreased in recent years has limited the growth of health insurance coverage, and with it, the demand for for-profit health services. Reform of the IPM system has the potential to increase coverage dramatically. In particular, the requirement that all salaried workers be covered could be enforced (currently, only one-fourth are covered). The IPM system also could be revised to make premiums based on actual loss experience, to provide reinsurance, and to prevent abuse.

4.5.2.4

Access to Credit

Twenty-five of 57 respondents (particularly specialists) to the HFS private sector provider survey complained about problems they encountered in seeking start-up financing. When they were able to secure financing, they often complained about the high interest rates (20 percent, in one case).¹³ Some physicians mentioned that they had been able to get loans through an African Development Bank program (*Fonds de Promotion Economique*), but that the procedures had been difficult and lengthy. The fact that so many physicians mentioned credit as a constraint suggests that providing better access to credit might be an inducement for some physicians (particularly the unemployed) to relocate outside of Dakar. Some part of their loans could be forgiven based on the volume of preventive care they subsequently provide.

4.5.2.5

Taxes and Import Duties

Almost all respondents to the HFS private sector provider survey lamented the high taxes they had to pay and the fact that they were, in the words of several respondents, treated by the government as “ordinary businessmen.” Indeed, the corporate tax rate is 35 percent, and the maximum personal income tax rate is 50 percent (World Bank, 1992a, 23). Additionally, 10 of 57 respondents (particularly specialists) mentioned high import duties on medical equipment as an important impediment when they established their practices. They said that the cost of equipment purchased in Dakar was three times that in Europe.¹⁴ One specialist said he spent 45 days in Italy

¹³ This is not surprising, given the many problems plaguing Senegal's banking industry. According to a recent World Bank report (1992, 28): “Various surveys of private entrepreneurs conducted in recent years as well as recent mission findings have highlighted credit (cost, access and availability) as one of the principal constraints to the growth of the private sector, particularly for newer, small- and medium-sized firms not having a substantial track record....” The same study cites interest rates of 19 percent as being common (after adding in special bank fees).

¹⁴ This claim is substantiated by the example given in a recent World Bank report (1992, 22) of an imported consumer textile product that was charged a series of cascading taxes, totaling 217 percent of its CIF value.

and France purchasing equipment for his practice and that even though he had to spend two weeks getting it cleared through customs, it still cost him only a fraction of what he would have had to pay for the same equipment in Dakar. The fact that physicians consider taxes to be such an impediment suggests that selective tax concessions might be used as a policy instrument to affect location decisions, as well as the proportion of practice activity devoted to preventive care. One interesting possibility might be to provide tax concessions to groups of physicians establishing HMOs.

4.5.2.6 Socioeconomic Conditions

Fifteen of 57 respondents to the HFS private sector provider survey mentioned that deteriorating economic conditions, particularly in the wake of the devaluation, had had an enormous negative impact on their practices and/or businesses. Patients were no longer able to afford their services, IPMs were insolvent, companies were closing, and the price of medications had increased significantly. One respondent observed that, as a consequence, some people were shifting to traditional practitioners. It is possible that current economic conditions may not permit the existing private health sector to survive, let alone expand its contribution to the public health agenda.

4.5.3 Prices and Ability to Pay

It is clear that the Senegalese already spend a considerable amount of their income on health services. The 1991-92 ESP collected data on all health expenditures during the 30 days preceding the interview. Overall, respondents indicated that they spent an average of 400 CFAF (4,800 CFAF on annual basis, or approximately \$18 per capita), 82 percent of which was spent on medications. However, the rural population spent considerably less than the urban population (an annual average of 2,364 CFAF versus 8,401 CFAF), with an even higher percentage going to drugs (88 percent versus 80 percent). Average expenditure per visit was 2,692 CFAF in urban areas and 1,037 CFAF in rural areas. The urban population accounted for 71 percent of total private household expenditures on health (Sadio, 1994, 38-40). Differences in health expenditures across income groups were marked, with the highest income quintile spending approximately 15 times more per capita than the lowest income quintile (\$62 versus \$5) (World Bank, 1994, 151).

Private sector prices vary considerably in Senegal, depending on the type of provider. According to the HFS survey of private sector facilities (Bitran, Brewster, and Ba, 1994, x), for-profit facilities charge up to 25 times as much as Catholic health posts. Workplace clinics tend to charge about half as much as for-profit providers. All types of private sector providers charge more than public sector providers. For example, fees charged at the relatively inexpensive Catholic health posts are approximately twice those charged at MOPHSA health centers and health posts. Inpatient charges at for-profit clinics are 10 to 20 times greater than inpatient fees at MOPHSA hospitals. The average prescription in a private pharmacy was 3,170 CFAF in 1987, which reflected both the 100 percent markup over producer prices at the time and the widespread use of brand-name drugs (Osmanski et al., 1991, 37). Clearly prices in the for-profit sector are out of reach to the vast majority of Senegal's population. According to respondents to the HFS private sector provider

survey, most private sector patients are covered by IPMs (as many as 85 percent), and the remainder are mostly foreigners.

5.0 CONCLUSIONS AND RECOMMENDATIONS

5.1 PRIVATE SECTOR CONTRIBUTIONS TO THE PUBLIC HEALTH AGENDA

The potential for the private sector to contribute to Senegal's public health agenda is limited, at least in the short term, for the following reasons:

- ▲ Most private sector facilities are located in and around Dakar, as well as a few large towns (e.g., St. Louis, Thiès), so that most of the population does not have ready access to the private sector.¹⁵ The major exception is the health posts operated by the Catholic Church, most of which are in rural areas.
- ▲ Prices tend to be quite high in the commercial (for-profit) sector, and this is a barrier to use for all but a relatively well-off minority. In some cases there are insufficient incentives for for-profit providers to provide public health services such as preventive care or and basic and low-cost (generic) drugs.
- ▲ Private providers (particularly physicians) tend to offer curative over preventive care and are currently oriented to providing relatively expensive services to a small segment of the population.
- ▲ The limited size of the salaried work force effectively constrains the growth of both private and social insurance, an important potential source of demand for private sector services. It also limits the potential for the population to benefit from workplace-provided services (a form of social insurance).
- ▲ Poor general economic conditions seriously limit demand for private for-profit health services and even, to some extent, for lower-priced services from nonprofit providers. In particular, the recent devaluation has had a severe impact on the standard of living of the traditional clientele of for-profit private health services—the middle and upper classes.
- ▲ The Catholic Church is probably the most important private source of public health services in Senegal, but due to its religious principles, it is unable to provide some types of services (e.g., modern contraceptives). This limits options for contracting with the Catholic Church to provide a full range of primary health services.

Despite these constraints, the continued rapid urbanization of Senegal and the growing role of private health providers in urban areas underline the need for an increased private sector role in the public health agenda, particularly in urban areas. Efforts to promote an enhanced private sector role could be directed to two areas: 1) distribution of public health commodities; and 2) delivery of

¹⁵ An important long-run consideration, however, is the fact that the urban population is growing at almost twice the rate of the rural population.

public health services. It is important that all projects assisting private sector service delivery be carefully evaluated for their impact and cost effectiveness. For example, there is no reason to invest in the private provision of preventive health care unless doing so will either increase overall levels of utilization or conserve public resources. Similarly, it will be necessary to ensure that private service delivery is sustainable after project assistance terminates.

5.1.1 Distribution of Public Health Commodities

The private sector can compensate for an inefficient public distribution system for contraceptives, ORS, iron supplements, and some other public health products. The private sector could eventually distribute all oral contraceptives in urban areas (possibly with subsidies initially) and could also take the lead in the distribution of condoms, ORS, and iron supplements in both urban and rural areas. Currently, there are two major obstacles to the private sector taking the lead in these areas: private sector prices are currently too high, and the private distribution system is geographically limited. High unit prices can be brought down through a social marketing program that increases sales volume. An important start has already been made with condoms. The existing pharmacy network is too limited to serve the rural areas. Accordingly, it may be necessary to distribute social marketing products through other types of retail outlets (e.g., bars, hotels). Although the sale of condoms outside pharmacies is still prohibited, the planned social marketing pilot program is to examine this issue. The commercial market for contraceptives should expand dramatically over the longer run, partly as a consequence of the demand-creating activities of the public sector program.

It may be particularly important to lay plans for the social marketing of ORS, for which demand is already substantial. Presently, ORS is available only at public health facilities through UNICEF donations, but the public sector facilities have not been able to maintain adequate supplies. Social marketing of ORS could ensure a consistent supply to consumers at an affordable price. Social marketing programs have also demonstrated their ability to promote the correct use of ORS and other health products through carefully targeted information, education, and communication (IEC).

5.1.2 Delivery of Public Health Services

The for-profit private sector may have the potential to play an important role in delivering public health services, particularly in urban areas. The principal constraints to the delivery of public health services by for-profit providers are: 1) their services are too expensive; 2) they are concentrated in and around Dakar; and 3) their motivation and experience in providing preventive services is limited. It might be possible, particularly in urban areas, to use vouchers to subsidize the provision of preventive care by for-profit providers. The GOS may be able to negotiate favorable prices for a greater volume of services, as has been done successfully in a number of social marketing programs. Unemployed physicians could be given favorable access to credit to set up

practices, with graduated loan forgiveness tied to their subsequent provision of preventive services.¹⁶ Still, it may be necessary to provide training and other forms of assistance to private sector providers (e.g., record-keeping, IEC, quality assurance), given their lack of experience with some types of preventive care. It may also be necessary for private physicians to experiment with less physician-intensive modes of service delivery (e.g., greater delegation of tasks to paramedicals).

The nonprofit and traditional sectors may be able to play an important role in the delivery of public health services in rural areas. After careful evaluation, it may be desirable to provide additional public subsidies to some nonprofit providers. Traditional providers may require some training, regulation, and supervision, but they may be able to play a valuable role in motivating rural populations to follow sound health practices.

5.2 IMPROVING COLLABORATION BETWEEN THE PRIVATE AND PUBLIC SECTOR

5.2.1 Improved Coordination

Given the very limited resources available to Senegal's health system, it is important that both public and private resources be used in such a way that they complement, rather than duplicate, each other. For example, in areas where large employers provide services to their employees and families, it may be cost-effective and equitable for the government to subsidize these facilities to provide services to the wider population than to invest in a separate government facility. Similarly, MOPHSA may take into consideration the location of private providers and facilities when planning its own investments. Improved coordination and mutual understanding of public health goals could be facilitated by integrating the private sector into the national health statistics system and having regular meetings with representatives of the major private sector organizations (e.g., a public-private health commission). It is interesting to note that several of the respondents to the HFS private sector provider survey called for improved collaboration and communication between the public and private sectors.

¹⁶ Vouchers for health care might be issued by local authorities on the basis of indigent status. The voucher may include the name of the person using it and the service delivered (to be filled in by the provider), and could be submitted by the private physician to the GOS for reimbursement. The issuing local authority could also share in these costs, to provide an incentive to prevent abuse. In addition to vouchers for indigents, private providers could also submit forms reporting on all public health services they provide. A portion of their start-up loans could be forgiven on the basis of the volume of such care provided (indigent + non-indigent). Such a system could form the basis of a reporting system for public health care provided by private physicians (which does not exist at present).

5.2.2 Collaboration with NGO Providers

There is already some effective collaboration between MOPHSA and nonprofit providers, such as the secondment of some MOPHSA staff to work in Catholic health posts. Given that there appears to be redundant personnel in some MOPHSA facilities and that some NGOs (e.g., Catholic health posts) currently achieve comparatively high levels of labor productivity, MOPHSA should consider seconding more of its personnel to NGO facilities. MOPHSA also should consider including NGO providers in training and other measures designed to improve the quality of care, given that these two categories of providers did less well than the for-profit sector in the quality of care indicators in the HFS public and private sector facilities surveys.¹⁷

5.2.3 Collaboration with Traditional Healers

There have been attempts in a number of projects (e.g., the Pikine project) to integrate traditional health workers into the modern health system. Given the extensive network of traditional health workers in Senegal and the fact that a large part of the population has no ready access to modern services, MOPHSA should consider making more systematic attempts to train traditional health workers and to develop good working relationships with them and MOPHSA. A mutual referral network could be developed between the two different systems of health care, as has been successfully done in some other settings (Hoff, 1992).

Because the entire population has access to traditional healers, because they appear to have the confidence of most villagers, and because they are often eager to be integrated into the national health agenda, traditional healers offer considerable potential as agents of change in rural areas. It has been suggested that they might be particularly helpful in the areas of neonatal tetanus control, family planning, and AIDS education (Finch, 1992). In this sense, perhaps they have the greatest potential among private sector groups to make a significant contribution to the public health agenda, particularly for the rural population.

It is interesting to note that 22 of 57 respondents to the HFS private sector provider survey expressed generally favorable views of traditional healers. Only eight respondents were generally negative, and the remainder either expressed a mixed assessment or no opinion. The most common complaint was that traditional healers did not use standard dosages and did not maintain sterile conditions. It may be worthwhile, at least on a pilot basis, to develop a collaborative project linking for-profit modern practitioners and traditional healers to address such concerns.

¹⁷ It is important to note that the observed comparability is confined to provider adherence to certain treatment standards (e.g., does the provider wash her/his hands between patients?). The private sector clearly provides higher quality services from the standpoint of its use of a more balanced input mix (fewer personnel inputs, more drugs and supplies).

5.2.4 Collaboration with Pharmacies and Pharmaceutical Sector

The private pharmaceutical production and distribution system seems to work quite well in Senegal. Its major shortcomings include: 1) high prices; 2) limited geographical coverage; and 3) an orientation toward specialty drugs. In contrast, the public sector pharmaceutical distribution system (PNA) has not been successful. PNA currently enjoys a monopoly as the provider of drugs to the public sector and to community drug funds. This market could be opened up to private competition.

Care should be taken that MOPHSA-sponsored revolving drug funds do not compete unfairly with private pharmacies and drug depots. In areas where the population has ready access to private drug retailers who agree to carry a range of basic drugs (including contraceptives and ORS) and to sell them at acceptable (possibly subsidized) prices, it may be unnecessary to sponsor community drug funds. It may also be desirable to eliminate taxes and duties on basic and low-cost (generic) drugs, so that retail prices will still be competitive with (though not necessarily equal to) those charged by community drug funds. It appears desirable to preserve the option of filling a prescription at a pharmacy, since this is the only way consumers can access the professional advice of a pharmacist. As one pharmacist responding to the HFS private sector provider survey explained, poor clients are often unable to afford all the medications prescribed by a health provider, and their initial reaction is to purchase only the relatively inexpensive medications. The pharmacist often is able to advise them as to which medications (e.g., an antibiotic) are most important.¹⁸

Currently, there are two categories of drugs distributed by pharmacies, normal drugs and “social drugs.” The GOS allows a 28 percent mark-up on the former and a 9 percent mark-up on the latter, with all taxes and duties suspended on both (to minimize the effects of the recent CFAF devaluation). The idea is presumably to keep the price of the social drugs down, so that lower-income consumers can afford them. However, one effect of this two-tier pricing is that pharmacies have less incentive to stock the social drugs, and stock-outs are common (World Bank, 1992b, 30). Pharmacists have been lobbying to eliminate the two-tiered system. It might make more sense to restore the taxes and duties on the normal drugs while continuing to exempt social drugs and simultaneously to permit pharmacies to charge a 26 percent mark-up on both.¹⁹

Social marketing could be used to take advantage of the private drug distribution system to provide and promote essential preventive health products (e.g., contraceptives, ORS) at prices all but the indigent can afford. Given the geographical limits of the drug retail system, in some cases

¹⁸ The best way to avoid this problem, however, is to use improved treatment protocols that eliminate prescriptions for unnecessary drugs.

¹⁹ It might even make sense to increase the mark-up on social drugs over that on normal drugs since the former are so much less expensive than the latter (that is, to make the absolute margins more equal); social drugs require as much service and shelf space as normal drugs. Over the long run, it will probably be desirable to discard all price controls, but this will require more competition among retail pharmacies than exists currently (due in part to MOPHSA restrictions on the location of new pharmacies).

(e.g., condoms), it may be necessary to go beyond pharmacies and drug depots to other distribution channels (e.g., bars, hotels).

5.2.5 Off-Hours Private Practices of Public Sector Physicians

A number of public sector physicians apparently have private practices during off-hours. Although there are regulations against such moonlighting, they have not been enforced. There are some potential advantages that may accrue to the public sector from such arrangements. First, it may make it easier to retain better quality staff without paying higher salaries if public sector providers have an opportunity to supplement their incomes through private practice. Second, private practice may draw higher-income patients away from heavily subsidized public sector services, thereby better targeting scarce public funds to those truly in need. Third, private practices may generate additional demand, in the form of paying clients, for underutilized public hospitals. For these reasons, it may be desirable for MOPHSA to be supportive of part-time private practice by some or all of its providers. At the same time, however, it is important to guard against certain abuses, including 1) public physicians may restrict services to clients in order to boost demand for their private practices; 2) public physicians may not fulfill their work obligations to the public sector; and 3) private patients may gain favored access to scarce public sector resources, so that the rich capture an even higher share of public sector health subsidies.

5.3 PROMOTING PRIVATE SECTOR DEVELOPMENT

5.3.1 Provide a Favorable Policy Environment

MOPHSA could clearly benefit from increased participation on the part of the private sector in the country's public health system. To achieve that, MOPHSA may want to identify the potential private sector contribution and to develop suitable strategic plans to make the private sector role explicit. MOPHSA also could seek to provide a stable regulatory environment in order to eliminate as much uncertainty as possible from the business environment (World Bank, 1992a, iv). MOPHSA also could maintain a continual dialogue with private providers, insurers, and pharmaceutical producers and distributors in order to cement closer working relationships over time.²⁰ In particular, the GOS could work closely with professional medical organizations such as the *Conseil de l'Ordre des Médecins* to promote a greater focus on public health issues and to identify ways that private health personnel can help increase access to care for under served populations. The GOS could develop a broader approach to regulation of the private sector beyond regulating competition.

²⁰ As a recent World Bank private sector assessment recommends (1992, iv): "Regular and open discussion between Government and private sector would also assist in reducing some of the uncertainties existing in the overall environment for business."

Perhaps more than anything else, the macroeconomic policies pursued by the GOS will affect the growth and development of the public health sector. Experience in other countries has demonstrated that the private health sector flourishes when economic growth and development is strong. Under these conditions, the population's demand for health services tends to increase more rapidly, creating favorable markets for private services. In contrast, the recent devaluation of the CFAF has had a strongly negative impact on the private health sector, both by doubling the cost of imported inputs (medicines, supplies, equipment) and by reducing the population's disposable income.²¹ On a positive side, the privatization of parastatals in several sectors should reduce the drain they have had on credit markets, making credit more readily available to private health providers for starting up or expanding their practices.

5.3.2 Stimulate the Growth of Health Insurance

The second most important determinant of private health sector development, after economic growth, may be the growth of health insurance coverage. Presently, health insurance is quite limited. Although the GOS requires all salaried workers to belong to IPMs, this requirement has not been strictly enforced, and only about a quarter of salaried workers are currently affiliated with an IPM. Also, most IPMs have had trouble meeting their various financial obligations. The GOS should consider taking steps to improve compliance with its compulsory insurance laws and to reform IPMs, including by:

- ▲ instituting a reinsurance system to cushion the effects of catastrophic losses incurred by some IPMs;
- ▲ requiring that premiums be sufficient to cover anticipated losses (based on previous loss experience) and that IPMs make wider use of copayments and other methods to control utilization (premiums are currently fixed at 6 percent of wages, with exemptions granted to some highly-paid employees);
- ▲ taking steps to eliminate abuse of IPM membership (e.g., members lending their cards to uncovered family members and friends).

Apparently, the GOS is planning to undertake one or more pilot health insurance schemes, by combining a community-based insurance scheme with an autonomous hospital. The insurance plan would indemnify members for hospital stays of up to a given duration (e.g., 15 days). Membership in the insurance plan would be voluntary. Presumably the objective of the scheme would be to ensure continued access by people in the community to hospital care where there is a transition to hospital autonomy and full cost recovery. It would be desirable for those designing such a project to consider the following:

- ▲ Voluntary insurance schemes have not worked very well because those in bad health tend to elect coverage whereas those with better health tend to remain outside the

²¹ The point is not that the devaluation itself was inappropriate but rather that the macroeconomic policies that may have rendered it necessary should be avoided in the future.

plans (the problem of “selectivity”). It is for this reason that most insurance schemes prefer to work with existing risk pools (e.g., all employees of a given enterprise) and to require that all persons in the pool join the plan.

- ▲ There will be a tendency, if uncontrolled, for those with insurance to make greater use of hospital care than those without insurance (the so-called moral hazard). This can lead to inequities in utilization between the insured and the uninsured, and it also can push the cost of insurance up over time. Co-payments and deductibles are used in some plans to control utilization, with mixed success.
- ▲ Providing only hospitalization coverage can skew utilization away from less expensive (but uncovered) outpatient services toward more expensive (but covered) inpatient care services.

Many of these effects have been observed in connection with hospital insurance in several developing countries.²²

5.3.3 Promote Hospital Cost Recovery

Currently, cost recovery is only very weakly implemented in MOPHSA hospitals, with exemptions given to many groups (e.g., civil servants) and with very lax means testing. Raising fees and applying them to all, removing exemptions, and using means testing to identify the indigent (and perhaps the near-indigent) could provide a powerful stimulus for health insurance and could level the playing field for private providers, who would no longer have to compete with free public sector services. Additional benefits from strengthened hospital cost recovery could include: 1) the referral system could be strengthened by introduction of proper price signals; 2) additional revenue could be used to improve the quality of hospital services, perhaps through granting greater autonomy to public hospitals; and 3) public subsidies could be more effectively targeted to the needy.

As noted, it appears that MOPHSA is planning to test a pilot approach to implementing hospital financial autonomy in conjunction with a community-based health insurance initiative.

5.3.4 Subsidize the Private Provision of Preventive Health Services

For-profit providers and pharmacies (i.e., the commercial sector) are not currently very interested, from a financial standpoint, in providing public health services. For example, few for-profit medical clinics provide preventive care other than immunizations, and pharmacists do not reliably stock many low-margin preventive health products (e.g., ORS). Yet, many urban residents (a rapidly increasing proportion of the total population) currently obtain most of their curative health services from the private sector, and public sector facilities have demonstrated great difficulty in

²² For a partial review of the available evidence, see Barnum and Kutzin (1993, 229-254).

maintaining proper stocks of these items. Under these conditions, the GOS should consider providing subsidies to private sector providers for provision of preventive services. As discussed above, a voucher scheme might be introduced on a pilot basis. A more modest measure would involve providing private physicians access to subsidized public health commodities (e.g., contraceptives, vaccines), training, and other assistance. In the case of pharmacies, it might be possible to waive taxes and duties for these public health products, to subsidize producers (to keep prices low enough to generate sufficient demand), and if necessary, to allow higher mark-ups than for other drugs (to provide the necessary incentive to pharmacists to stock lower-priced items).

The GOS could also require that all private and social insurance plans include coverage for preventive health services.

5.3.5 Expand the Availability of Credit

Physicians responding to the HFS private sector provider survey indicated that they faced serious obstacles in gaining access to start-up capital. Streamlined credit programs could be made available to private practitioners to establish their practices, with particularly favorable terms for those willing to establish practices in under-served areas. Loans could be partially forgiven on the basis of the level of preventive services these physicians subsequently provide.

5.3.6 Examine Taxes and Import Duties

It is difficult to make a convincing case for lowering either the taxes or import duties faced by most private medical practitioners. In fact, an important feature of recent macroeconomic reform has been the elimination of complex systems of exemptions and special cases and the substitution of simple, uniform tax and import duty systems. However, given the importance attached to these items by physicians, it might be possible to use selective tax and import duty exemptions to encourage increased involvement of private sector physicians in public health activities. Examples would include granting tax concessions to physicians willing to locate their practices in under-served areas or allowing both tax concessions and reduced import duties to physicians setting up HMOs.

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